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                    IN THE UNITED STATES DISTRICT COURT
                 FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

STUDENTS FOR FAIR ADMISSIONS,  *
INC.,                          *
                               *
            Plaintiff,         *   Case No. 1:14CV954
                               *
vs.                            *
                               *   November 18, 2020
UNIVERSITY OF NORTH CAROLINA,  *
et al.,                        *   Volume 7
                               *   Pages 1116-1307
            Defendants.        *
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EXPEDITED TRANSCRIPT OF TRIAL
BEFORE THE HONORABLE LORETTA C. BIGGS
UNITED STATES DISTRICT JUDGE

APPEARANCES:

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For Plaintiff:       CONSOVOY MCCARTHY, PLLC
                         Thomas R. McCarthy, Esquire
                         Patrick Strawbridge, Esquire
                         James F. Hasson, Esquire
                         Bryan K. Weir, Esquire

                     BELL DAVIS & PITT, P.A.
                         Daniel Alan M. Ruley, Esquire

For UNC Defendants:  SKADDEN ARPS SLATE MEAGHER & FLOM, LLP
                         Patrick J. Fitzgerald, Esquire
                         Lara A. Flath, Esquire
                         Amy L. Van Gelder, Esquire
                         Marianne H. Combs, Esquire

                     NORTH CAROLINA DEPARTMENT OF JUSTICE
                         Stephanie A. Brennan, Esquire
                         Tamika Henderson, Esquire

For Intervenors:     LAWYERS' COMMITTEE CIVIL RIGHTS UNDER LAW
                         David G. Hinojosa, Esquire
                         Genevieve Bonadies Torres, Esquire

                     NORTH CAROLINA JUSTICE CENTER
                         Jack Holtzman, Esquire
                         Emily P. Turner, Esquire
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1	**P R O C E E D I N G S**
2	**THE COURT:** Good morning to all.
3	**MS. FLATH:** Good morning, Your Honor.
4	**MR. MCCARTHY:** Good morning, Your Honor.
5	**THE COURT:** Are there any matters we need to address
6	before we resume at this time?
7	**MR. MCCARTHY:** No, Your Honor.
8	**THE COURT:** All right. Thank you.
9	Mr. McCarthy, your witness.
10	**MR. MCCARTHY:** Thank you, Your Honor.
11	**THE COURT:** Uh-huh.
12	**CONTINUED CROSS-EXAMINATION**
13	**BY MR. MCCARTHY:**
14	Q. Good morning, Dr. Hoxby.
15	A. Good morning, Mr. McCarthy.
16	Q. Can you hear me okay?
17	A. I can. I have a bit of an echo. Yesterday it died out
18	after the first minute or so, so let's see if it dies out again
19	today.
20	Q. Okay. If it remains, let us know. I'm sure it can be
21	taken care of.
22	**THE COURT:** Let me ask my clerk to get in touch with
23	Efren so we can fix it, but you can proceed at this time.
24	**MR. MCCARTHY:** Absolutely, Your Honor.
25	Q. (By Mr. McCarthy) Dr. Hoxby, you are an editor at the

1 *Annual Review of Economics,* correct?

2 A.   I was an editor. I'm not currently serving as an editor.

3 Q.   You serve, I think -- began serving around 2010; is that

4 about right?

5 A.   That's probably right. I would have to look at my CV to be

6 absolutely sure.

7 Q.   Okay. And when did you stop serving as an editor?

8 A.   Probably 2018.

9 Q.   Okay. So then you're familiar with the paper "Affirmative

10 Action in Undergraduate Education" by Professor Arcidiacono and

11 also Professors Lovenheim and Zhu.

12 A.   I did not edit that paper, and I am no more familiar with

13 that paper than I would be at this time by just having skimmed

14 it at some point.

15   **THE COURT:** Mr. McCarthy, I'm going to ask Efren to

16 come forward.

17   We apparently are having an echo. She is hearing an echo.

18   **MS. FLATH:** Dr. Hoxby, are you still hearing the echo?

19   **THE WITNESS:** It's disappearing. It seemed the same

20 yesterday. It seemed to start with an echo and then

21 disappearing.

22   **MR. RENTERIA:** Ask her a question now.

23   **MR. MCCARTHY:** Dr. Hoxby, are you still hearing an

24 echo?

25   **THE WITNESS:** No. I'm not hearing an echo, no. Thank

1 you.

2   **MR. MCCARTHY:** Thanks, Efren.

3   **MR. RENTERIA:** I apologize, Judge.

4   **THE COURT:** Thank you.

5 Q. (By Mr. McCarthy) Dr. Hoxby, the *Annual Review of*

6 *Economics* is a peer-reviewed journal for which you were one of

7 the editors at the time, correct?

8 A. Well, I was one of the editors of the *Annual Review of*

9 *Economics.* I'm not sure what you mean by "at the time."

10 Q. At the time that that paper was published in 2015.

11 A. I probably was, yes.

12 Q. And there were about eight editors at the journal at that

13 time?

14 A. Yes, and that paper was never assigned to me.

15 Q. The journal invited Professor Arcidiacono to write that

16 paper, correct?

17 A. Some authors volunteer papers, and some of them are asked.

18 I don't know which of the two applied to him.

19 Q. This paper is about affirmative action in undergraduate

20 education, which is in an area of interest for you, correct?

21 A. Well, I'm interested in all of the economic education.

22 Q. And is it your testimony that you have never reviewed this

23 paper?

24 A. I believe I may have skimmed it once when it was submitted

25 to the National Bureau of Economic Research, but, no, I'm not

1 very familiar with the paper.

2   (Witness video feed was lost.)

3   **MR. FITZGERALD:** I will step out to ask Aaron if we

4 can track her down.

5   **THE COURT:** All right. Thank you.

6   (Pause in the proceedings.)

7   (Witness video feed resumed.)

8   **THE COURT:** You may proceed.

9 Q. (By Mr. McCarthy) Good morning again, Dr. Hoxby. Can you

10 hear me okay? Can you hear me?

11 A. Yes, I can.

12 Q. Okay. Great. We'll try it again. Sorry for the technical

13 difficulties. We appreciate your patience. I'm going to go

14 back to the last question because I'm not sure whether we got

15 through it.

16   Is it your testimony you have never reviewed this paper?

17 A. I believe that I skimmed it once when it was submitted for

18 presentation at the NBER, but it was not put on the agenda. So

19 I've not read it thoroughly, and it was quite some time ago. I

20 don't have a strong memory of it.

21 Q. So are you familiar or not with the fact that it surveys

22 the economics literature on affirmative action in undergraduate

23 education?

24 A. I would say I'm only partially familiar with it.

25 Q. Okay. Are you aware that the paper uses the average

1 marginal effect in evaluating the effect of racial preferences

2 in undergraduate admissions?

3 A. No.

4 Q. UNC produced six years of applicant data in this case,

5 correct?

6 A. Yes, it did.

7 Q. For the 2011-'12 through the 2016-'17 admission cycles,

8 correct?

9 A. That's correct.

10 Q. And that data set included data on more than 200,000

11 applicants from those six admissions cycles, correct?

12 A. Yes, I believe that's correct.

13 Q. In estimating your admissions models in your opening

14 report, you used only data from the 2013-'14 through the

15 2016-2017 admissions cycles, correct?

16 A. Yes, that's correct.

17 Q. You did not use the first two years of data in any of your

18 admissions models in your opening report, correct?

19 A. No, I did not. I used them in my rebuttal reply reports.

20 Q. There were more than 60,000 applicants in those two cycles,

21 correct?

22 A. In the two earlier cycles?

23 Q. Yes.

24 A. Yes, 2011, 2012.

25 Q. I'd like to look at your Slide No. 6. Do you have it?

1 A.   I have it in front of me.   Thank you.

2 Q.   Great.

3   This slide shows -- it shows your nine additive models,

4 correct?

5 A.   Yes.   You showed the regression models in which

6 race/ethnicity and other factors are additives.   That means

7 they're added on.

8 Q.   Thank you for the clarification.

9   So it has those nine models with a description of the

10 specification there, correct?

11 A.   Yes, that's correct.

12 Q.   And then there's a column with the R-squared there,

13 correct?

14 A.   Yes, R-squared or pseudo R-squared, whichever is applied.

15 Q.   Okay.   I was just going to ask that.   That's actually a

16 pseudo R-squared technically, correct?

17 A.   Yes, because admissions models are nonlinear or choice

18 models (indiscernible).

19   (Court reporter requests clarification.)

20 Q.   I'm sorry to interrupt.   The court reporter is having

21 trouble hearing you.   Could you back up?

22   I think the question was that that R-squared is technically

23 a pseudo R-squared there, correct?

24 A.   Yes.   The admit/reject decision is a choice decision, a

25 yes/no-type decision, also called a binary decision.   So in all

1 choice models what we show is pseudo R-squared.

2 Q. The information in this table is taken from a larger table

3 in your opening report. That's Exhibit 1, Table 1, correct?

4 A. Yes.

5 Q. I'd like to go to that table, so please let me know when

6 you have your opening report. I know you have a bunch of

7 binders to wade through over there.

8 A. I believe I have it in front of me.

9 Q. Okay. And the opening report -- I know there's not page

10 numbers, but I guess we have it here, Exhibit 1, Table 1. This

11 table purports to show the share of admissions decisions due to

12 race/ethnicity for your nine additive models that we were just

13 talking about, correct?

14 A. Yes, that's correct.

15 Q. And to compute this, you used a technique known as the

16 Shapley decomposition, correct?

17 A. Yes.

18 Q. In your reports, you don't cite any academic paper in which

19 an economist performed a Shapley decomposition of a pseudo

20 R-squared to determine the effect of race in admissions

21 decisions, correct?

22 A. It's a decomposition that's been around since the 1950s, so

23 we often don't cite something that's so common.

24 Q. You mentioned yesterday being the program director of the

25 Economics of Education program at NBER, correct?

1   A.   Yes.

2   Q.   Are you aware of any NBER working paper in that program

3   that uses the Shapley decomposition?

4   A.   I am not aware, but there may very well be some.

5   Q.   And Professor Arcidiacono's annual review paper that we

6   discussed before, you're not aware whether that mentions the

7   Shapley decomposition?

8   A.   No, although I would have recommended that he use one if he

9   needed the same purpose to be fulfilled.

10   Q.   None of your own academic papers uses the Shapley

11   decomposition, correct?   It's not reported in any?

12   A.   A Shapley decomposition is used for specific purposes in

13   econometrics and statistics.   I don't happen to have another

14   paper that has ever needed that particular purpose with it.

15   Q.   Your Shapley decomposition analysis determines the -- or

16   sorry.   Strike that.

17   Your Shapley decomposition analysis purports to determine

18   the effect of race and ethnicity on all admissions decisions

19   across all racial groups in the relevant model, correct?

20   A.   Yes.

21   Q.   If you looked at -- if you looked just at the effect of

22   Native Americans on all admissions decisions, then the Shapley

23   decomposition would yield a smaller share than for the race as

24   a whole, correct?

25   A.   Would you re-ask that question?   I don't think I really

1 understood what you were trying to ask.

2 Q. Okay. Sure. It might help if we go to your Slide 10

3 because I know I don't ask all the economics questions the

4 best. Maybe it will help with an example.

5   So -- I'm sorry. I'll let you get to it.

6 A. I have it in front of me.

7 Q. Thank you. So let's say we look at the top row. The top

8 row there in Slide 10 of the graphic on the top left shows

9 "Share of admission decision due to race/ethnicity," and it

10 says 0.8 percent there in the top row, correct?

11 A. Yes.

12 Q. So if -- if, instead, it was reporting the share of

13 admission decision due to being Native American, that would be

14 less than 0.8 percent for Model 1, wouldn't it?

15 A. Yes. You can do the Shapley decomposition in which each

16 and every variable is taken separately, so do a Shapley

17 decomposition in which there was a Shapley decomposition for

18 Native American, a Shapley decomposition for being African

19 American and so on. You could break out the racial and ethnic

20 groups separately.

21 Q. Let's now discuss the R-squared and pseudo R-squared. I'd

22 like to go back to that Exhibit 1, Table 1, from your opening

23 report that we discussed earlier.

24 A. Yes.

25 Q. The R-squared is a statistical metric that indicates how

1 well the factors included in a regression model explain the

2 outcome, correct?

3 A. Yes, it is a measure -- it's what we call a goodness-of-fit

4 measure.

5 Q. And it represents the percentage of the variation in the

6 data explained by the model, correct?

7 A. Yes. In the denominator is how much the model could

8 explain if it only included a constant (indiscernible).

9   (Court reporter requests clarification.)

10 Q. I'm sorry, Dr. Hoxby. The court reporter is having trouble

11 hearing you again. If we could back up and start that again.

12   I think the question I asked was that the R-squared

13 represents the percentage of the variation in the data

14 explained by the model, correct?

15 A. Roughly speaking, that's true. I was about to give you the

16 definition.

17 Q. I don't need the definition right now.

18   In other words, if a model has an R-squared of .50, that

19 means the model explains 50 percent of the variation in the

20 data, correct?

21 A. That's about right.

22 Q. Okay. And, again, here technically what you're using is a

23 pseudo R-squared, correct?

24 A. Correct.

25 Q. And to be clear, there are many different pseudo R-squared

1 metrics used in economics, correct?

2 A.   There are a few common pseudo R-squared used in economics.

3 McFadden's pseudo R-squared, which is the one that I used, is

4 the most standard, probably the most commonly used. I'm not

5 positive about that, but it is the -- it is the default pseudo

6 R-squared that most statistical programs apply, suggesting that

7 it is fairly standard.

8 Q.   Thank you. The R-squared in Professor Mad -- I'm sorry.

9 The R-squared in Professor McFadden's pseudo R-squared both run

10 on a scale from 0 to 1, correct?

11 A.   That's correct.

12 Q.   And for both, higher values indicate a better fit of the

13 data, correct?

14 A.   They're goodness of fit measures. Yes, it means the model

15 explains more of the (indiscernible).

16   (Court reporter requests clarification.)

17 Q.   Did you say more of the variation of the data?

18 A.   More of the variation in the data.

19 Q.   Thank you.

20   But the R-squared in Professor McFadden's pseudo R-squared

21 are not equivalent, correct?

22 A.   Daniel McFadden designed pseudo R-squared to be as

23 analogous as possible to R-squared. So they both have the same

24 concept in the denominator, in other words, what a model could

25 explain if it had no explanatory factors in it, it only had a

1 constant term. So it's just taking an average, you might think

2 of it that way. And then in the numerator, how much the model

3 can explain when all of the explanatory factors are included in

4 the model. So in both cases, it has the same concept in the

5 numerator and the denominator.

6   The difference between the two is that because the choice

7 model is a nonlinear model, the analogy to that denominator and

8 numerator which would otherwise be R-squared is log-likelihood,

9 and that's just because the likelihood (indiscernible).

10   (Court reporter requests clarification.)

11 Q. I'm sorry, Dr. Hoxby. The court reporter lost your last

12 sentence there. Do you want to repeat the last thing you said?

13 A. Certainly. That's because the log-likelihood is what is

14 analogous to the sum of squares in a linear model.

15 Q. Professor McFadden himself has stated that the values of

16 the pseudo R-squared tend to be considerably lower than those

17 of the R-squared, correct?

18 A. There is a quotation that I discussed earlier with

19 Ms. Flath taken from an article by Daniel McFadden about

20 transportation modes, but that quotation is in reference not to

21 a binary model like the admit/reject modeling, but with regard

22 to a multinomial model or a model which there are possibly many

23 choices. The more choices you have, the more difficult it is

24 for the model to be able to explain the data simply because

25 there are so many dimensions on which choices can interact with

1 one another. Thus, his statement about pseudo R-squared in

2 that context may have been appropriate for that context, but he

3 was not talking about a binary model, which is much, much my

4 model.

5 Q. Can you point to any academic paper that says that when the

6 outcome is binary, the pseudo R-squared should be interpreted

7 in the exact same way as the R-squared?

8 A. We never interpret binary models and linear models in

9 exactly the same way because they're really designed for

10 somewhat different purposes. I would think it would be very

11 unusual to find such a statement because it wouldn't make a lot

12 of sense really. You have --

13 Q. So is the answer to my question -- I'm sorry. Go ahead.

14 A. Well, the first thing that an economist or a statistician

15 would say is that a binary model is not equivalent to a linear

16 model. So I think the statement that you had would be somehow

17 downstream from that, and I -- it would be hard to imagine

18 someone saying that when they have just said that the two

19 models weren't equivalent to one another.

20 Q. So I want to make sure I understand your position. Your

21 position is that the pseudo R-squared shows the percentage of

22 the variation in the data explained by the model, correct?

23 A. Yes, roughly speaking. That's a way to interpret it.

24 Q. You understand that Professor Arcidiacono disagreed with

25 you about that, correct?

1 A.   I am just reflecting what's in the literature.

2 Q.   You're familiar with Professor William Greene's

3 econometrics textbook, correct?

4 A.   Yes, I am.

5 Q.   I think it's cited in your rebuttal report, correct?

6 A.   Yes, I'm reasonably familiar with it.

7 Q.   Let's look at that textbook. Can we go to page -- do you

8 have it there, Professor -- I mean -- sorry -- Dr. Hoxby?

9 A.   I'm not sure I do. Is it possible that I have just a few

10 pages from it?

11 Q.   I don't know, but here's what we'll do. I will read you

12 the relevant passage, okay? This is on page 533. I'll give

13 you a minute to look around to see in case you have it.

14 A.   I do not believe I have it. I was sent another statistic

15 book. Do you think it's possible that I was sent the --

16   (Witness video feed was lost.)

17   (Pause in the proceedings.)

18   (Witness video feed resumed.)

19   **MS. FLATH:** Would it be all right if Mr. Shore stays

20 in the back of the courtroom?

21   **THE COURT:** That would be fine.

22   **MR. MCCARTHY:** May I proceed, Your Honor?

23   **THE COURT:** Yes.

24 Q.   (By Mr. McCarthy) Dr. Hoxby, can you hear me okay?

25 A.   Yes, I can hear you okay.

1 Q. Great. Were you able to find that textbook?

2 A. No, I definitely do not have it. I was sent a different

3 textbook on statistics, but perhaps I was sent the wrong one.

4 Q. I might ask you questions about another one too, so that

5 one you may need. But what I'll do is I will read the relevant

6 portions of this textbook. Everybody in the courtroom will be

7 able to see it, but I'll read it to you. I'll try to read it

8 slowly. If you -- you know, if I don't get it out well or you

9 don't understand, please feel free to ask me to reread it,

10 okay?

11 A. Yes.

12 Q. And this is Professor William Greene's textbook, the one

13 that you cite in your rebuttal report.

14   Here is the relevant passage: "A measure of fit that was

15 originally proposed for discrete choice models in McFadden,

16 1974, but surprisingly has gained wide currency throughout the

17 empirical literature is the likelihood ratio index, which has

18 come to be known as the pseudo R-squared."

19   Did you hear that okay?

20 A. Yes, I did.

21 Q. So the likelihood ratio index and McFadden's pseudo

22 R-squared are the same thing, correct?

23 A. Yes.

24 Q. I'm going to read another passage. It's a little bit

25 further down on the same page in the book.

1   "The statistic does resemble the R-squared in a linear

2 regression. The choice of name for this statistic is

3 unfortunate, however, because even in the discrete choice

4 context for which it was proposed, it has no connection to the

5 fit of the model to the data."

6   Did you hear me okay there?

7 A. Yes.

8 Q. Let's look at another textbook by Professor Kenneth Train.

9 That may be the one you have. It's -- *Discrete Choice Methods*

10 I believe is the title.

11 A. I do not have that textbook either.

12 Q. Okay. I guess we'll do the same thing. You're familiar

13 with Professor Kenneth Train?

14 A. Yes, I know of him.

15 Q. This text was cited in Professor Arcidiacono's rebuttal

16 report on page 11, and we're going to look at -- within Chapter

17 3, we're going to look at page 68, which is on the screen.

18 I'll do the same thing as before since you don't have the

19 textbook with you. I'm going to highlight in here what's on

20 the screen, and I'll read it to you, okay? This is Professor

21 Train.

22   "It is important to note that the likelihood ratio index is

23 not at all similar in its interpretation to the R-squared used

24 in regression, despite both statistics having the same range.

25 R-squared indicates the percentage of the variation in the

1 dependent variable that is explained by the estimated model.

2 The likelihood ratio has no intuitively interpretable meaning

3 for values between the extremes of zero and one."

4   Did you hear me okay there?

5 A. Yes.

6 Q. Great. Can you look at your Slide No. 10?

7   **MR HINOJOSA:** Your Honor, I'm going to object on the

8 grounds of both argumentative and hearsay.

9   **THE COURT:** Overruled.

10   You may proceed.

11 Q. (By Mr. McCarthy) Do you have your slides in front of you,

12 Dr. Hoxby?

13 A. I do. I'm just rearranging my papers.

14 Q. Please take a minute if you need it. No problem at all.

15 A. Go ahead.

16 Q. Thank you.

17   This is your Slide 10. We've looked at this before. In

18 the table on the left, there's a column captioned "Share of

19 admission decision due to race/ethnicity," correct?

20 A. Yes.

21 Q. And you calculated all the values in that column based on

22 the premise that the pseudo R-squared represents the percentage

23 of the admission decision explained by the model, correct?

24 A. As I mentioned, Mr. McCarthy, that is roughly one

25 interpretation of R-squared/pseudo R-squared. An

1   interpretation that is consistent with both of them is the

2   improvement from what we call the null model, which is what I

3   described before, so that (indiscernible).

4   (Court reporter requests clarification.)

5   Q. I'm sorry, Doctor. I'm sorry to interrupt you again. The

6   court reporter is having trouble hearing you. I apologize.

7   Technical difficulties make this more cumbersome than normal.

8   Could you please go again?

9   A. Okay. So as I mentioned to you earlier, you can roughly

10   think the concept of R-squared as being about the variation

11   explained by the model, but the method of thinking about the

12   analogy more closely is that both R-squared and pseudo

13   R-squared measure the improvement from what we call the

14   (indiscernible).

15   (Court reporter requests clarification.)

16   Q. I'm sorry. Did you say the null, Dr. Hoxby?

17   A. The null model.

18   Q. The null model.

19   A. N-u-l-l, the model that essentially is null.

20   In both cases, that model has only a constant term or an

21   intercept, whether it's a linear model or a binary model. So

22   that would go in the denominator, either the total sum of

23   squares of the null model in the linear model or the total or

24   the log-likelihood of the null model, and is pseudo R-squared.

25   So they both have -- the denominator is this null model, and

1 the numerator is the fitted model, and both concepts are trying

2 to see how much more you can explain by fitting a model with

3 explanatory factors rather than using the null model. So, as I

4 said in colloquial English, we might use that sort of rough

5 interpretation, but if we look at the actual equations, it's

6 the change from the null model to the fitted model.

7 Q. So they're both fractions, correct?

8 A. Both of them have a numerator and a denominator with

9 analogous fractions.

10 Q. The numerators are both different, correct?

11 A. Well, yes, because a linear model uses the sum of squares,

12 as I mentioned earlier; and in a nonlinear model, the

13 log-likelihood is the analogy to the sum of squares.

14 Q. The denominators are also different, correct?

15 A. Again, for the same reason. In a linear model, we're

16 looking at the sum of squares, and in a nonlinear model like a

17 logit or a (indiscernible).

18   (Court reporter requests clarification.)

19 Q. Did you say probit model? I'm sorry to interrupt. A

20 p-r-o-b-i-t?

21 A. Exactly. We're using the log-likelihood because that is

22 what the model is trying to prove, sort of the likelihood of

23 (indiscernible).

24   (Court reporter requests clarification.)

25 Q. The last sentence again, please. I'm sorry.

1 A. The likelihood of the model in colloquial terms. You can

2 think about likelihood as being just like the probability of

3 something. This is the log -- natural log of the likelihood.

4 Q. Thank you.

5 A. That's what's used in the nonlinear model.

6 Q. If Professor Arcidiacono is correct that the pseudo

7 R-squared cannot be interpreted as the percentage of the

8 admission decision explained by the model, then the figures in

9 that column on Slide 10 do not accurately report the share of

10 admission decisions due to race; isn't that true?

11 A. I do not agree with Professor Arcidiacono's

12 characterization.

13 Q. Let's look further at your use of the pseudo R-squared. I

14 believe you have your opening report with you.

15 A. I do. I'm just getting it now.

16 Q. Sure.

17 A. To what page?

18 Q. I'm sorry. Can you turn to page 19.

19 A. I have it in front of me. Thank you.

20 Q. Right at the top of the page is a carryover of

21 paragraph 44. It says "predict" at the top, and I want to look

22 at the -- starting with "For instance...," right after that.

23 Can you read the rest of that paragraph there starting with

24 "For instance..."?

25 A. Yes. "For instance, if the regression discovered a formula

1 with an R-squared of 1.0, I could use the formula to predict

2 the admissions decision, and the prediction would be correct

3 100 percent of the time. However, if the regression discovered

4 a formula with an R-squared of only .5, predictions based on

5 that formula would be correct only 50 percent of the time.

6 Likewise, a regression that had an R-squared .5 [sic] would

7 produce a formula that predicted the admissions decision

8 correctly 25 percent of the time."

9 Q. Thank you. And just to be clear again, when you say

10 "R-squared" in this paragraph, technically you mean pseudo

11 R-squared -- correct? -- McFadden's pseudo R-squared that we

12 discussed, correct?

13 A. Well, in this paragraph, I'm trying to help the

14 nontechnical reader understand the concept in question, and so

15 it really is not about R-squared or pseudo R-squared in

16 particular, but, rather, about the general way that we

17 understand such measures of goodness of fit or such measures as

18 improvements from the null model, the fitted model. But it's

19 meant to be a -- excuse me. It's meant to be a kind of

20 intuitive definition for a reader who isn't technical.

21 Q. So what -- I want to make sure we're on the same page here

22 for just a minute. When you say that the formula predicts

23 admissions decisions correctly in that paragraph, you mean

24 predicting both admission for admits and rejection for rejects,

25 correct?

1 A. Yes.

2 Q. Okay. So since that was a general statement you said in

3 that paragraph, I want to ask you a question: If we're talking

4 about McFadden's pseudo R-squared, okay, would a model with

5 McFadden's pseudo R-squared of 0.5 make predictions that were

6 correct only 50 percent of the time?

7 A. No, that's not the right way to think about either

8 R-squared or pseudo R-squared. That's not -- that's not the

9 way it works.

10 Q. So let me do this. You have a sentence up here, for

11 example. You say -- let's take the last sentence of that

12 paragraph you read: "...a regression that had an R-squared of

13 .25 would produce a formula that predicted the admissions

14 decision correctly only 25 percent of the time." I want to

15 take that sentence, and I'm going to put McFadden's R-squared

16 in there. I'm going to read it to you, and I want you to tell

17 me something about it after that.

18   A regression that had a McFadden's pseudo R-squared of .25

19 would produce a formula that predicted the admissions decision

20 correctly only 25 percent of the time; is that a true

21 statement?

22 A. The statement that you've made doesn't quite make sense in

23 the following way: I think -- as a -- you know, as a broad

24 generalization, roughly speaking, there -- it would not be a

25 terrible thing to say. It would be a reasonable thing to say.

1 But it's important to understand that a choice model such as

2 we've been describing, admit versus reject, does not actually

3 predict the -- the admitted or rejected in a kind of 0/1 way

4 like yes/no. What comes out of a model like a logit or probit

5 model is the student's predicted probability of admission. It

6 does not deliver a series of admit/reject decision. What comes

7 out of the model is predicted (indiscernible).

8   (Court reporter requests clarification.)

9 Q. Predicted probabilities of admission, is that what you

10 said?

11 A. Correct.

12 Q. Thank you.

13 A. So we might get a 57 percent probability that a student was

14 admitted, but we would not put out a bunch of students who were

15 in an "admit" column and students who were in a "reject"

16 column. That's not the way those models work.

17 Q. Thank you.

18   I'd like to turn back to Professor Greene's textbook, which

19 I understand you don't have, so we'll try to do this the way we

20 did it before. We're going to go to page 703, and there's an

21 example in the middle of the page that I'll direct everyone's

22 attention to in the courtroom.

23   That will be highlighted on the screen, Dr. Hoxby, and I'm

24 going to read this to you, okay?

25   "Example 17.6, prediction with a probit model. Tunali,

1 1986, estimated a probit model in a study of migration,

2 subsequent remigration, and earnings for a large sample of

3 observations of male members of households in Turkey. Among

4 his results, he reports the summary shown here for a probit

5 model: The estimated model is highly significant, with a

6 likelihood ratio test of the hypothesis that the coefficients,

7 16 of them, are zero based on a chi-squared value of 69 with

8 16 degrees of freedom. The model predicts 491 of 690, or

9 71.2 percent, of the observations correctly, although the

10 likelihood ratio index is only 0.083."

11   Did you hear me okay there?

12 A. Yes.

13 Q. Thank you. According to this example in Professor Greene's

14 econometrics textbook, he has a model there, a probit model,

15 which is what you used, correct?

16 A. Yes, a probit model.

17 Q. And that probit model that he uses in this example has a

18 pseudo R-squared of 0.083, and it correctly predicted

19 71.2 percent of the observations, correct? That's what the

20 example shows?

21 A. Since I can't see the example, it's very difficult for me

22 to judge. I'm --

23 Q. I can read the relevant sentence back, if you'd like.

24 A. I'm having to guess at what model is being described. I'm

25 guessing it's a count model because that would be the only way

1 it would be translated that way into a binary variable, but

2 since I can't see the example, it's very difficult for me to

3 judge.

4 Q. You reported that the pseudo R-squared of your preferred

5 Model 9 is .428, correct?

6 A. Correct, yes.

7 Q. I'd like to look at Professor Arcidiacono's reply report

8 now. Why don't you take a moment to find

9 Professor Arcidiacono's reply report.

10 A. I have that in front of me. Thank you.

11 Q. Great. Please turn it to page 25. And when you get there,

12 you'll see Table 2.3 at the top of that page. Do you see it?

13 A. I do.

14 Q. Great. Professor Arcidiacono tested the accuracy of your

15 preferred Model 9; and in that table, he reports that your

16 preferred Model 9 accurately predicted 85.1 percent of UNC's

17 admissions decisions, correct?

18 A. Well, Professor Arcidiacono's method of computing accuracy

19 here is a little unusual. I can describe it to you. So

20 normally with a binary model what happens is that -- as I say,

21 a binary modeling does not actually produce admit/reject

22 admissions. What it produces is a probability of admissions or

23 rejection.

24   So usually when we compile count statistics, which it

25 sounds like you might have been describing to me before in that

1 example, the count statistics are based on a 50 percent

2 threshold. So we would say if I have a greater than 50 percent

3 probability of being admitted, I'm going to (indiscernible).

4   (Court reporter requests clarification.)

5 Q. I'm sorry, Dr. Hoxby. You said -- I'm sorry to interrupt.

6 I'm trying to help the court reporter.

7   You said if there's a greater than 50 percent probability

8 of admission?

9 A. Right. Let's say the model predicts that a person has a

10 greater than 50 percent probability of being admitted, then the

11 researcher might say, "I assign that person to having been an

12 admit." Okay. The person wasn't necessarily actually an

13 admit, but that would be what the modeling suggested. If a

14 person is less than 50 percent predicted probability of being

15 admitted, then the researcher might say, "I assign that person

16 as a reject according to the model." That is a fairly standard

17 way of computing count statistics --

18 Q. Thank you.

19 A. -- which are -- but that's not what Professor Arcidiacono

20 is doing.

21 Q. My question was a yes-or-no question. Does

22 Professor Arcidiacono report there that your preferred Model 9

23 accurately predicted 85.1 percent of UNC's admissions

24 decisions?

25 A. Professor Arcidiacono has a novel and nonstandard

1 definition of accuracy that is not based on the sort of counts

2 that I've just described. I can tell you exactly how he

3 computes it, but it is novel and ad hoc.

4 Q. Let's turn to your Slide 17. Do you have it in front of

5 you?

6 A. I've got it in front of me. Thank you.

7 Q. Great. Thank you. In this slide, you take the position

8 that the median marginal effect is a better metric for

9 evaluating the magnitude of UNC's racial preferences than the

10 average marginal effect, correct?

11 A. Yes, because the average marginal effect can give much

12 undue weight to outliers, whereas the median would not give

13 such undue weight to outliers.

14 Q. The admit rate for all applicants to UNC is about

15 25 percent, correct?

16 A. Yes, I believe that's about right. It differs somewhat

17 from year to year.

18 Q. It's less than 50 percent both for in-state applicants and

19 out-of-state applicants, correct?

20 A. Yes, that's my understanding.

21 Q. For out-of-state applicants, it's less than 15 percent,

22 correct?

23 A. Yes, for out-of-state applicants, the admit rate is lower.

24 Q. And for out-of-state African American applicants, the admit

25 rate is around 16 or 17 percent, correct?

1　A.　I believe that is correct, yes.

2　Q.　Now, the model is going to predict that some applicants

3　have a higher probability of being admitted than other

4　applicants, correct?

5　A.　Yes, that's what the model would predict.

6　Q.　And on average, it is going to predict a higher probability

7　of admission for those who are admitted than for those who are

8　rejected, correct?

9　A.　No.　It is based on admissions and rejection decisions, but

10　it is not necessarily the case that someone who is actually

11　admitted has a higher estimated admissions probability based on

12　the model.

13　Q.　Let me state my question again.　On average, it is going to

14　predict a higher probability of admission for those who are

15　admitted than those who are rejected, correct?

16　　　　　　**MS. FLATH:**　Your Honor, objection; asked and answered.

17　　　　　　**THE COURT:**　I'm going to allow her to answer that

18　again.

19　　　You may answer that.

20　　　　　　**THE WITNESS:**　Okay.

21　　　　　　**THE COURT:**　Would you like for him to restate the

22　question?

23　　　　　　**THE WITNESS:**　Could you restate the question?

24　Q.　(By Mr. McCarthy)　Certainly.　On average, it is going to

25　predict a higher probability of admission for those who are

1 admitted than for those who are rejected, correct?

2 A. Unless the model is very flawed, yes, that would be

3 correct.

4 Q. Turning off race, as you do here, will lower the

5 probability of admission for African American applicants,

6 correct?

7 A. Yes.

8 Q. And if we average across everyone, it will include those

9 who are actually admitted and those who are actually rejected,

10 correct?

11 A. Yes, they're in the pool of data.

12 Q. But the median applicant to UNC is a rejected applicant,

13 correct?

14 A. This doesn't have anything to do with median applicants.

15 This has to do with taking the median of the estimated marginal

16 effect.

17 Q. The median applicant to UNC is a rejected applicant,

18 correct?

19 A. Yes, but this doesn't have anything to do with the median

20 applicant.

21 Q. Similarly, the median African American applicant to UNC is

22 a rejected applicant, correct?

23 A. Yes. I see no relevance. Perhaps you could help me a

24 little bit here.

25 Q. Because the median applicant is a rejected applicant, the

1 median marginal effect is likely going to be a low figure,

2 correct?

3 A. No. This is -- we cal -- the calculation here is of the

4 marginal effects. That's a -- sorry. That's an estimate based

5 on the model of an effect of a particular factor, so it doesn't

6 have to do -- now, we can take the average overall of the

7 estimated marginal effects or we could take the median of all

8 of those estimated marginal effects -- in fact, we could take

9 any statistic based on that distribution of estimated marginal

10 effects, but it doesn't have anything to do with median

11 students. We're talking about the median of an estimate, not a

12 median student.

13 Q. Where more than half of the students are rejected, correct?

14 A. Certainly more than half of the students who apply to UNC

15 are rejected.

16 Q. You don't cite any academic papers that use a median

17 marginal effect, correct?

18 A. I don't think I need to. This is just explaining, here are

19 these estimated marginal effects. There are various statistics

20 that we could compute to try to summarize those marginal

21 effects, and a -- one statistic might be the average. Averages

22 are always subject to outliers, and another statistic which

23 also emphasizes typicality or what is normal would be the

24 median.

25 Q. You're aware of the ongoing Harvard affirmative action

1 case, correct?

2 A. I'm aware of it, yes.

3 Q. You're aware that Harvard retained an economist in that

4 case?

5 A. Yes.

6 Q. And you're familiar with David Card from Berkeley who they

7 retained?

8 A. Yes, I am well aware of him.

9 Q. And you're aware that David Card employed average marginal

10 effect analysis in determining the effect of race at Harvard?

11   **MS. FLATH:** Objection, Your Honor; foundation. The

12 question was "you're aware." He didn't say "are you."

13   **THE COURT:** Well, "Are you aware...."

14   **MR. MCCARTHY:** I can restate it.

15   **THE COURT:** All right.

16 Q. (By Mr. McCarthy) Are you aware that David Card employed

17 average marginal effect analysis in determining the effect of

18 race at Harvard?

19 A. No, I am not specifically aware of that.

20 Q. Let's look at another one of your slides. I'd like for you

21 to find your Slide 15.

22 A. I wonder if I could clarify something --

23   **THE COURT:** You may.

24 A. -- Mr. McCarthy.

25 Q. (By Mr. McCarthy) You may.

1 A. I think if you were asking is it wrong always to look at

2 average marginal effects, it wouldn't be wrong in every

3 circumstance. As I mentioned, both the average and the median

4 are measures of centrality or typicalness. However, the

5 average is much more sensitive to outliers.

6   It could very well be in the Harvard case -- I don't have

7 the data, so I don't know -- that the average and the median

8 are very similar because there are not large outliers in the

9 Harvard case. So I do not think that one can conclude that the

10 median would have made a big difference in the Harvard case.

11 It might have looked very similar to the average. You have to

12 understand about the outlier, and Harvard has a somewhat

13 different admissions pool of students than UNC, I would say

14 narrower in terms of qualifications.

15 Q. Let's look at your Slide 15.

16 A. Yes.

17 Q. You remember discussing Professor Arcidiacono's academic

18 index decile analysis, correct?

19 A. Yes, I do.

20 Q. And on this slide, you actually show two of

21 Professor Arcidiacono's slides, correct?

22 A. I do.

23 Q. And those slides show admit rates by decile, correct?

24 A. That's correct.

25 Q. The one on the left is for in-state applicants, and the one

1 on the right is for out-of-state applicants, correct?

2 A. Yes.

3 Q. There are -- and there are some large disparities by race

4 among admit rates within the same deciles, correct?

5 A. It depends on the decile.

6 Q. Let's take Decile 5. Let's look on the one on the left,

7 Decile 5. The admit rate for white applicants in Decile 5 is

8 29.56 percent, correct?

9 A. Yes.

10 Q. And then for Asian American applicants, it's 28.67 percent;

11 for African Americans, it's 71.23 percent; and for Hispanic

12 applicants, it's 53.72 percent, correct?

13 A. Yes.

14 Q. Okay. Let's look at the other slide of

15 Professor Arcidiacono's that you have there. This is the one

16 for out-of-state applicants, correct?

17 A. Yes.

18 Q. And we'll go to Decile 5 again. The admit rates are: For

19 white applicants, 2.90 percent; for Asian American applicants,

20 1.38 percent; for African Americans, 39.61 percent; and for

21 Hispanic applicants, 15.97 percent, correct?

22 A. Yes.

23 Q. Now --

24 A. I don't think we have a question here.

25 Q. Okay. Your view is that the most important and relevant

1   academic index deciles are the ones at the top because, as you

2   put it, most of the admits at UNC come from the very top

3   deciles, correct?

4   A.   For instance, for in-state students, 75 percent of the

5   admits come from the top deciles, Deciles 7 through 10; and for

6   the out-of-state applicants, 80 percent of the admits come from

7   the top three deciles: 8, 9, and 10.

8   Q.   And you claim that Professor Arcidiacono improperly focuses

9   on the deciles, quote, on the bubble, correct?

10   A.   Yes, I believe that is an improper focus because it's

11   focusing on part of the admissions pool that is on the bubble

12   between admissions and rejection where even small differences

13   in a student's qualification or characteristics can make a

14   difference; and while that is part of the admissions decision,

15   to focus on it unduly is to overemphasize the importance of

16   those marginal decisions and the marginal characteristics that

17   might make a difference. If one was using race and ethnicity,

18   say, minimally overall in the admissions process, then you are

19   most likely to find that it would affect a student's admission

20   decision for a student who was right on the bubble. It's not

21   wrong --

22   Q.   And that's the -- I'm sorry. Go ahead.

23   A.   It's not wrong to look at those students, but one should

24   not describe them as representative of the admissions process

25   because they actually play a fairly minor role in the

1 admissions process.

2 Q. This is the point that you were -- this is the point that

3 you were trying to make with this slide, correct?

4 A. Yes.

5 Q. And you pointed out in particular on the bubble, for

6 example, Deciles 4 through 6 in state, correct?

7 A. Yes.

8 Q. Okay. Can we turn to your rebuttal report at page 14? You

9 did an analysis there of admission by academic index decile.

10 A. Yes, I have it here in front of me.

11 Q. Thank you.

12 Do you remember doing an analysis where you equalized admit

13 rates as between URM and non-URM applicants within the same

14 deciles? Correct?

15 A. Yes. These are the Arcidiacono index deciles.

16 Q. Thank you.

17 And you showed those results here in Exhibit 2, Table 1,

18 and in the following pages, including in Exhibit 2, Figure 2A,

19 and Exhibit 2, Figure 2B, correct?

20 A. Yes.

21 Q. Thank you. I'd like to look at your data behind that

22 analysis.

23 **MR. MCCARTHY:** Mr. Lawrence, can you please put up an

24 Excel file? It has a technical name here. It says

25 EX002-Figure 2A/2B-Table 1. Thank you.

1 Q. (By Mr. McCarthy) Do you have this one in front of you,

2 Dr. Hoxby?

3 A. I do not know. Could you give me the number or the

4 reference, please?

5 Q. Yes. You should have had, I believe, three Excel files

6 that were produced to you, and this one, the file name -- and

7 I'm sorry. It's not an easy one. But it's EX002-Figure

8 2A/2B-Table 1. And it has eight small tables on it. It's, in

9 fact, your work paper underlying the decile analysis we just

10 discussed.

11 A. Okay. I have not seen this particular Excel file in a very

12 long time, so I'm just looking at it to make sure that I

13 understand --

14 Q. Okay.

15 A. -- what is being represented here.

16 Q. Well, we can walk through it together. There should be

17 two -- there's two tabs on the actual Excel file. If you have

18 it in hard copy, I guess there might be two pages. Presumably

19 the first page would be the first tab.

20   But just to make sure, if you're looking at in state, you

21 should see "URM," "Non-URM," "Total" and a bunch -- right

22 underneath that ten deciles and some numbers in there.

23 A. Yes.

24 Q. And the first -- I want to make sure we're both looking at

25 the same thing. The first row is Decile 1, and you see a 33

1 under "URM" and then a 14 under "Non-URM" and then a 47 under

2 the total.

3 A. No, I'm not looking at the same page yet. I'm -- I have a

4 page that must look quite similar.

5 Q. I'm sorry. I'm sorry. I might have confused you there.

6 There's -- that was my fault. There's four -- so if we're

7 looking at the same page, you'll see maybe eight small tables,

8 unless it's printed out oddly; and the first table on the top

9 left -- I'm sorry -- it says "URM," "Non-URM," "Total," and

10 then I can give you the numbers to see if this matches up and

11 you have the same one.

12 A. Please do.

13 Q. The first row there says Decile 1. Under "URM," it says

14 3,044. Under "Non-URM," it says 2,224; and then under "Total,"

15 it says 5,268. Do you have that one in front of you?

16 A. I do not. Just be patient. I will try to find -- I now

17 know what numbers I'm looking for, and I should be able to

18 probably find it.

19 Q. Great. Thank you. I appreciate your taking the time here

20 to find it.

21   (Pause in the proceedings.)

22 A. Could you repeat those numbers again? I think I may have

23 it now.

24 Q. Okay. So on the table on the top left, under "URM,"

25 "Non-URM," "Total" in the row that's Decile 1, you see 3,044

1   underneath "URM"; 2,224 under "Non-URM"; and 5,268 under

2   "Total."

3   A.   Mr. McCarthy, I don't believe I have this. I understand

4   the sort of table that you are looking at, but the particular

5   one that you are describing I do not believe that I have. If

6   you don't mind, I'll keep looking for another minute.

7   Q.   We'll give you a little bit of time, and if we don't find

8   it quickly, I'll just explain what's on the relevant –- what

9   I'm going to point to because there's not actually all that

10 much data on this I want to talk about.

11   **MS. FLATH:** Professor Hoxby, if I may, are you able to

12 look at an exhibit if we were to e-mail it to you on your

13 computer?

14   **THE WITNESS:** Yes, I could.

15   **MS. FLATH:** With Your Honor's permission, we'll do

16 that.

17   **THE COURT:** Yes, let's do that.

18   **MR. MCCARTHY:** Your Honor, do you want to take a break

19 right now while they do that?

20   **THE COURT:** We can do that. It would make sense.

21   Let us take our morning recess, and we'll resume at five

22 till 11:00.

23   (A morning recess was taken from 10:39 a.m. until

24 10:55 a.m.; all parties present.)

25   **THE COURT:** Yes, sir. You may proceed.

1   **MR. MCCARTHY:** Thank you, Your Honor.

2   **THE COURT:** Yes.

3 Q. (By Mr. McCarthy) Dr. Hoxby, can you hear me okay?

4 A. Yes, I can hear you very well.

5 Q. Great. So I believe you have the Excel file now that we

6 were trying to talk about; and just to reset, this relates to

7 the analysis you did where you equalized admit rates between

8 URM and non-URM applicants within the same deciles, correct?

9 A. Yes.

10 Q. Great. And this Excel file is the work paper underlying

11 that decile analysis?

12 A. Yes, I believe so.

13 Q. There are two tabs. The first one is in state. Can you

14 look at that one?

15 A. Yes, I'm looking at the in-state tab.

16 Q. Perfect. So the first table shows all applicants by decile

17 over the six-year period, correct?

18 A. That's correct.

19 Q. And those applicants are reported as URM and non-URM,

20 correct?

21 A. That's correct.

22 Q. And I should note that the order of the deciles is inverted

23 compared to how you and Professor Arcidiacono have presented

24 them in court. So the tenth, or top, decile is actually listed

25 at the bottom here, correct?

1 A. Yes.

2 Q. The next table, moving to the right, shows admit rates for

3 URM and non-URM admits, correct?

4 A. That's correct, yes.

5 Q. Again, this is over the six-year period, correct?

6 A. That's correct.

7 Q. The third table on that top row shows the number of admits

8 per decile over the six-year period, correct?

9 A. That is correct, yes.

10 Q. And, again, that's displayed by URM and non-URM applicants,

11 correct?

12 A. Yes, that's correct.

13 Q. So if we look at the URM admits in that table, the number

14 of URM admits is highest in Deciles 4 through 6, correct?

15 A. Yes.

16 Q. Decile 4 has 512 URM admits. Decile 5 has 596 URM admits,

17 and Decile 6 has 582 URM admits, correct?

18 A. Yes.

19 Q. Thank you.

20   I'd like to talk a little bit about overfit now. I'd like

21 to go to your rebuttal report.

22 A. Could you give me a page, please?

23 Q. Absolutely. I'd like you to go to Exhibit 3, Figure 1.

24 A. Does this have a DX number, or is it in the text on a

25 certain page?

1 Q. Your rebuttal report does have a DX number. I believe it's

2 DX111; and Exhibit 3, Figure 1 is in the back, one of the

3 unnumbered pages in the appendix.

4 A. Okay. I have it in front of me.

5 Q. Great.

6   In assessing overfit, you have compared out-of-sample error

7 to in-sample error, correct?

8 A. Yes, that's one of the two methods I used. It's a little

9 less preferred, but it's more familiar.

10 Q. This figure shows the percentage increase in mean squared

11 error between in and out of sample for your preferred model and

12 each of Professor Arcidiacono's models, correct?

13 A. That's correct.

14 Q. And the point you're trying to make there is that the

15 percentage increase measure shows that Professor Arcidiacono's

16 models are overfit, correct?

17 A. Yes, they are overfit.

18 Q. Okay. And here where you're trying to make this point, you

19 show Model 9 -- your preferred Model 9, but you didn't show the

20 percentage mean squared error for your other models, correct?

21 A. Model 9 is my preferred model.

22 Q. Okay. I'd like you to look at slide --

23 A. It wouldn't --

24 Q. I'm sorry.

25 A. Because my preferred Model 9 contains more factors than any

1 of my other models, if any of my models were overfit, it would

2 necessarily be Model 9.

3 Q. Okay. I'd like you to look at the set of slides we

4 disclosed here on cross-examination. You should have it. It's

5 a small set. I think it should be about, I think, nine slides,

6 maybe, and I would like you to look at the third one there.

7 A. Would it be at all possible for you to describe what I

8 ought to be seeing on this slide so I can see it quickly?

9 Q. Sure. So if you find this -- like I said, it should be a

10 set of, I think, about nine slides, and it would be the third

11 one in that group. If you look at it, it says at the top

12 "Professor Hoxby's Overfit Measures for all of her Additive

13 Models." And there's a table with five columns and nine rows.

14 So this set of slides, if it's helpful, on the first page of

15 the set of slides, I believe it's Exhibit 1, Table 1, from your

16 opening report. So maybe that will help you identify it.

17 A. I found them. Thank you.

18 Q. Great. So please turn to the third one in that set. As I

19 said, it's a slide. At the top it says "Professor Hoxby's

20 Overfit Measures for all of her Additive Models." Do you have

21 that one in front of you?

22 A. I do.

23 Q. Great. And it should have your model numbers down the left

24 side and then four columns to the right after that?

25 A. Yes, exactly.

1 Q. Great. So the middle columns of this slide show in-sample

2 error and out-of-sample error for all of your additive models,

3 correct?

4 A. Yes.

5 Q. And the first column after the model numbers shows the

6 percentage increase in mean squared error between in and out of

7 sample for each of your models, correct?

8 A. Yes, that's correct.

9 Q. The lowest percentage increase in mean squared error is for

10 your first model, correct?

11 A. Yes, that would necessarily be true.

12 Q. But your first model is among your least accurate models in

13 terms of both in-sample mean squared error and out-of-sample

14 mean squared error, correct?

15 A. Yes, because it has hardly any factors.

16 Q. So let's look at your Slide 19 now, but I would like you to

17 hold onto this one because we may come back to it.

18   Do you have your Slide 19?

19 A. I do.

20 Q. Thank you.

21   In your direct testimony, you didn't show percentage

22 increase in mean squared error that you showed in your reports.

23 Instead, you showed the difference between in-sample and

24 out-of-sample mean squared error, correct?

25 A. Yes.

1 Q. So there's no percentage mean squared error reported on

2 your Slide 19, correct?

3 A. Well, you can take the difference and then divide it by the

4 in-sample number and get that same percentage. It's actually

5 on the slide, but you have to do the calculation yourself, I

6 guess.

7 Q. You could use those numbers to get it is your point?

8 A. Yes, it contains all the same content.

9 Q. Among your models on this slide, you showed the difference

10 in mean squared error for your preferred Model 9, but you

11 didn't show it for the other models, correct?

12 A. Yes. As I've emphasized, if any model is going to be

13 overfit, it would necessarily be -- overfit the most, it would

14 necessarily be Model 9.

15 Q. Let's go back to the slide we were just looking at, the one

16 that's the third slide in the set we provided you, the one that

17 you just had your hands on a minute ago, the one that said

18 Professor Hoxby's overfit measures.

19 A. Right. I've got it.

20 Q. Okay. Good. I'm sorry. I just wanted to make sure we're

21 not getting mixed up between slides.

22   In the last column of this slide, the difference between

23 your in-sample and out-of-sample mean squared error is shown

24 for all of your models, correct?

25 A. That's correct.

1   Q.   And the smallest number is for your first model, correct?

2   A.   Yes.

3   Q.   I'd like you to look at another slide. This would be from

4   Professor Arcidiacono's direct examination. It's Slide 53.

5   It's a slide that you may have seen that has two curves on it.

6   It's got a red curve and a blue curve.

7   A.   Yes.

8   Q.   This textbook graph illustrates the concept of overfit as

9   Professor Arcidiacono explained it, correct?

10 A.   As Professor Arcidiacono explained it.

11 Q.   And it shows that where a model is overfit, the

12 out-of-sample error will increase, correct?

13 A.   Yes.

14 Q.   All right. I'd like to talk briefly now about predictive

15 accuracy. Can you go to your Slide 21 now? Do you have it in

16 front of you?

17 A.   Yes, I do.

18 Q.   Great.

19 A.   But, Mr. McCarthy --

20 Q.   Yes.

21 A.   -- could I clarify something about the last figure at which

22 we were looking? I think what you emphasized to me in that

23 figure with the red and the blue lines was simply that the red

24 line goes down first and then comes back up. I think that's

25 what you wanted me to see. But what matters for overfit

1 actually is the relative nature of those two lines: The blue

2 line, which is the in-sample error, and the red line, the

3 out-of-sample error.

4   So what this graph is -- what this graph is meant to

5 illustrate is that we know that models are overfit when the

6 out-of-sample error relative to the in-sample error starts to

7 be much larger; whereas, on the left half of the graph what

8 we're meant to understand is that the in-sample error and the

9 out-of-sample error are tracked out together. In fact, they

10 should really almost lie on top of one another, those two

11 lines, if the model (indiscernible).

12   (Court reporter requests clarification.)

13 Q. What was the last couple of words you said, if the model is

14 what?

15 A. If a model is not overfit. So we look at the left-hand

16 side of this figure; and as we add explanatory factors to the

17 model, we create a model more accurate in the sense that it

18 accurately predicts a sample. And both the red and the blue

19 lines should be moving down together. In fact, they should

20 really lie over one other, be almost indistinguishable. But I

21 can understand why you might make a graph that doesn't show

22 them lying right on top.

23   The importance of the right side of the graph is that the

24 blue line keeps going down while the red line goes up. What

25 we're learning here is that it appears that the model is

1 looking better and better; but relative to the in-sample mean

2 squared error, the out-of-sample mean squared error, it's

3 always the bifurcation of the two lines that matters. You

4 can't just -- it wasn't meant to be a graph where you just look

5 at the blue line. We need to look at the two lines and how

6 they lay together.

7 Q. And the graph illustrates that the difference in mean

8 squared error generally increases right from the start, right?

9 A. No. The difference in mean squared error falls as

10 you (indiscernible).

11   (Court reporter requests clarification.)

12 Q. Sorry, Dr. Hoxby. The court reporter cannot hear you. Can

13 you please start again?

14 A. Okay. On the left-hand side of the graph, the mean squared

15 error falls as more variables are added to the regression model

16 as long as those explanatory factors are not generating

17 overfit. Both the red line and the blue line are declining,

18 which means the error is declining.

19   On the right-hand side of the graph, we can see that the

20 blue line, or the in-sample mean squared error, continues to

21 fall, giving us the false impression that our model is

22 accurate. But by comparing that blue line to the red line,

23 which is now starting to head up in an increasing direction, we

24 can see that the out-of-sample error and the in-sample error

25 are moving away from each other. That tells us that we're in

1 the overfit type of model situation. We want them to -- we

2 would want that red line to keep following the blue line on

3 down if not overfit.

4 Q.   Professor Hoxby, your Model 1 of all your models has the

5 smallest difference between in-sample mean squared error and

6 out-of-sample mean squared error, correct?

7 A.   Yes.

8 Q.   Thank you.

9   I'd like to look at -- talk about protective accuracy a

10 little bit. Let's go to Slide 21 -- your Slide 21, please.

11 A.   Yes.

12 Q.   Your position is that turning off racial preferences does

13 not reduce the accuracy of Professor Arcidiacono's model that

14 much, and you conclude from that that race must not be having a

15 large effect on admissions, correct?

16 A.   In this slide, I am adopting Professor Arcidiacono's novel

17 concept of accuracy, with which I do not agree, but

18 nevertheless I am using so that I can understand how it plays

19 out in his models. So in this slide, I'm using his preferred

20 model, which is Model 4, with the race coefficients as he

21 estimates them -- that would be the first line -- and then

22 removing or throwing out all of those racial coefficients and

23 otherwise continuing to use the same model.

24 Q.   When you turn off the race coefficients, the factors in the

25 model that correlate with race will increase in importance in

1 order to try to explain admissions decisions that were

2 influenced by race, correct?

3 A.   In this particular case, what I'm doing is adopting

4 Professor Arcidiacono's own method of not changing his model

5 coefficients but simply either zeroing them out or switching

6 all students to being of the same race, which is equivalent in

7 these two cases. That is his method, and so I am adopting that

8 method and also how he defined accuracy.

9 Q.   I'll ask my question again: When you turn off the race

10 coefficients by setting them to zero, the factors in the model

11 that correlate with race will increase in importance in order

12 to try to explain admissions decisions that were influenced by

13 race, correct?

14 A.   No, not unless you reestimate the admissions model, which

15 Professor Arcidiacono does not do.

16 Q.   Native Americans typically make up less than 2 percent of

17 the admitted class, correct?

18 A.   Yes.

19 Q.   As a hypothetical, let's assume there were massive

20 preferences for Native American applicants, okay?

21 A.   As a hypothetical, yes.

22 Q.   Okay. Great. Taking out the effect of those preferences

23 would never affect more than a tiny portion of the overall

24 accuracy of the model, correct?

25 A.   Probably not, because the Native Americans are such a small

1 share.

2 Q. Thank you.

3   Your Slide 21 is based off of Exhibit 3 in your reply

4 report, correct?

5 A. Yes, I believe it is. If I can just find that.

6 Q. Great. Let's go to your reply report to Exhibit 3.

7 A. I have it in front of me. Thank you.

8 Q. Thank you.

9   Here you reestimated Professor Arcidiacono's preferred

10 model but without race, correct?

11 A. I believe -- I can check my reply report -- and I think I

12 might do that -- but my understanding is that what we did was

13 what Professor Arcidiacono does in several models, which is

14 that he zeros out or turns all the students into the same race,

15 which, as I say, is equivalent, but not reestimate the model

16 without racial preference.

17 Q. Okay. But then you reported the accuracy without racial

18 preferences, correct?

19 A. That's correct.

20 Q. Okay. I want to look into what you did there a little bit

21 more closely. We can pull out the accuracy specifically for

22 African American and Hispanic applicants. Please look at

23 Exhibit 11 from your deposition. And I believe counsel sent

24 that to you during the break, in addition to a couple days ago

25 probably.

1 A. Counsel did send that to me.

2 Q. Great.

3 A. Okay. I have it in front of me.

4 Q. Thank you.

5   I showed this to you at your deposition, correct?

6 A. I believe you showed it to me at my deposition if -- yes.

7 Q. It's got a little sticker down at the bottom right that

8 shows that I did.

9   **MR. MCCARTHY:** For the record, I should note, Your

10 Honor, it says "Confidential" at the top. You may see it on

11 your screen. The parties have agreed prior to this time that

12 this is no longer confidential.

13   **THE COURT:** All right. Thank you.

14 Q. (By Mr. McCarthy) The accuracy for in-state African

15 American admits was 86.2 percent when the model was estimated

16 with racial preferences, correct?

17 A. I didn't compute these numbers. So I am looking at the

18 same table as you and I am willing to believe that they were

19 computed accurately, but I didn't compute them. So I'm

20 agreeing with what the number is.

21 Q. I'll represent to you that this came from your analysis.

22   The accuracy for in-state African American admits falls to

23 65.6 percent without racial preferences, correct?

24 A. Yes.

25 Q. So accounting for racial preferences by including them in

1 the model makes the modeling much more accurate for African

2 American in-state admits, correct?

3 A. According to Professor Arcidiacono's novel and nonstandard

4 measure of accuracy, yes, it does change the number from 86.2

5 to 65.6.

6 Q. And these numbers are the same ones underlying the analysis

7 that you did that we just showed. And if you look down to out

8 of state now -- you can see the header there -- the accuracy

9 for out-of-state African American admits was 74.6 percent when

10 the model was estimated with racial preferences, correct?

11 A. Yes, with Professor Arcidiacono's novel model of accuracy,

12 which I do not accept. That is highly nonstandard.

13 Q. When race is taken out of the model, the accuracy for

14 out-of-state African American admits falls to 17.9 percent,

15 correct?

16 A. With the same proviso that I just gave you in answer to

17 your last question.

18 Q. This drop -- this drop in accuracy illustrates that the

19 model has a very difficult time predicting out-of-state African

20 American admits after racial preferences are taken out of the

21 model, correct?

22 A. Well, the way that Professor -- I really have to go back to

23 what Professor Arcidiacono -- there isn't an easy answer to

24 this question because this measure of accuracy is so novel.

25 What Professor Arcidiacono is doing is something that is fairly

1   ad hoc, and so I don't know that I would conclude that.

2   The reason is I discussed earlier with you how in a logit

3   or probit or choice model, we might decide to divide the

4   students, those with an above 50 percent probability of being

5   admitted and those with a 50 percent probability of being

6   admitted, and then compare them to actual admits and rejects.

7   That would be what we would call a count statistic. We can

8   also have an adjusted statistic, but that's good enough, I

9   think, as an explanation.

10   What Professor Arcidiacono does to get his accuracy

11   measures is something quite odd. He estimates these predicted

12   probabilities of admission, and then he ranks all of the

13   students from the highest predicted probability to the lowest

14   predicted probability, and he admits a class about equal to the

15   size of UNC. And since that is a very nonstandard thing to do,

16   it's difficult for me to describe that as -- in the way that

17   you described it. You said this shows that the model is

18   inaccurate for African Americans once we take out racial

19   preferences.

20   I would say I would have to think about the way in which

21   this novel way of assessing accuracy plays out differently for

22   African Americans, Hispanics, whites, Asians. It's so

23   nonstandard that it's very difficult for me to say that it is

24   actually a notion of accuracy in the way that your question

25   asked. It's just -- it's an exercise for sure, but I -- I just

1 don't feel comfortable using this measure of accuracy because

2 of this peculiar way in which the predicted probabilities are

3 used, which could come out very differently for students of

4 different races.

5 Q. Let's turn to your Slide 16.

6 A. I have it in front of me. Thank you.

7 Q. Great. On the right-hand side is your critique of what you

8 call Professor Arcidiacono's "share due to" analysis, correct?

9 A. Yes, that's part of the critique.

10 Q. That table comes from Exhibit 1 of your reply report,

11 correct?

12 A. Yes.

13 Q. Let's go to your reply report, Exhibit 1.

14 A. Can I have a page number?

15 Q. It's in the appendix at page 52 of the PDF, so it's, I

16 guess, the 52nd page of the document. I guess it's the first

17 exhibit in your reply report.

18 A. Yes, I have the page in front of me. Thank you.

19 Q. Thank you.

20   The first panel is looking at in-state applicants, correct?

21 A. That's correct.

22 Q. And the first column shows your "share due to" calculations

23 for African American applicants, correct?

24 A. Yes, uh-huh.

25 Q. And as you explain in the footnotes at the bottom of this

1 exhibit, for each of the variables listed on the left, you

2 reset the value to the minimum, correct?

3 A. The minimum that is observed in the applicant pool, not the

4 minimum that could possibly attain.

5 Q. So, for example, you set the SAT math and verbal scores to

6 the minimum in the data in computing what you call the share

7 due to SAT preferences, correct?

8 A. Yes.

9 Q. And the minimum value in the data for the SAT math score is

10 200, correct?

11 A. I'm not aware of any applicant who has an SAT math score of

12 200, but it's possible. That's the minimum possible.

13 Q. You could check your code, which SFFA disclosed a couple

14 days ago.

15   The minimum value in the data for the SAT verbal score is

16 also 200, correct?

17 A. I don't know the answer to that question. Those sound like

18 suspiciously low numbers to me, unless they were erroneous.

19 Q. Getting a 200 on the math and 200 on the verbal would yield

20 a total score of 400, correct?

21 A. Yes. You get a 200 for signing your name.

22 Q. Changing an SAT score to the minimum would turn any

23 applicant into an automatic reject, correct?

24 A. If the student's score is actually 200-200, yes, I would...

25 Q. So it's unsurprising that changing the SAT score to the

1   minimum observed in the data would have a massive effect on an

2   African American applicant, correct?

3   A.   My understanding -- and I did have a conversation about

4   this not very long ago -- is that the minimums are not as low

5   as you are reporting; but certainly if one were to go from 200

6   to, say, 800 on one of the individual exams, I would expect

7   that to have a massive effect, yes.

8   Q.   And you can confirm the minimum scores with counsel at a

9   break if you'd like.

10   Let's look at the second number in that column, the

11 32.8 percent.   This is for the share due to GPA preferences, as

12 you reported here.   To calculate this number, you set the GPA

13 to be the minimum, correct?

14 A.   With any applicant, yes.

15 Q.   And the minimum GPA is a 1.0, correct?

16 A.   Again, Mr. McCarthy, these numbers that you're quoting may

17 be accurate, but they sound inaccurate to me.

18 Q.   I'll represent to you that it's accurate, and you can

19 confirm that with your counsel at a break if you'd like.

20 A.   All right.

21 Q.   A GPA of 1.0 is essentially straight Ds on a four-point

22 scale, correct?

23 A.   Yes.

24 Q.   In the third row, you mentioned percentile preferences.

25 This refers to percentile rank in a class, correct?

1 A.   That's correct, class rank.

2 Q.   And, again, you set this percentile to the lowest value,

3 correct?

4 A.   The lowest value observed in the admissions data.

5 Q.   And in the next four rows, those are UNC's ratings,

6 correct?

7 A.   Yes, they are.

8 Q.   And, again, you were setting those ratings to their lowest

9 values in the data, correct?

10 A.   Right, in the admissions data, Carolina data.

11 Q.   So you set them to 1s for each one of those ratings here,

12 correct?

13 A.   Yes, that would be the case.

14 Q.   And in the bottom panel for out-of-state applicants, you

15 did the same thing, correct?

16 A.   Yes. The point is they couldn't add up to more than

17 100 percent, regardless of the scale.

18 Q.   I understand.

19   I'd like to look at some comparisons now. Let's go back to

20 the first row. To calculate this number, you need to use

21 Professor Arcidiacono's Model 4 to predict admissions

22 probabilities for all the in-state African American applicants

23 with SAT scores now set to that minimum value, correct?

24 A.   Yes.

25 Q.   And then you calculated the average marginal effect,

1 correct?

2 A. Well, I calculated what Professor -- what

3 Professor Arcidiacono is calling "share due to" using the same

4 methodology he did.

5 Q. And a higher average marginal effect will give you a higher

6 number in this column, correct?

7 A. No. I think -- do you mean in his model or in this

8 exercise?

9 Q. In this exercise.

10 A. So a marginal effect in the model is the -- well, it's not

11 a causal effect in this model because it's not a causal model.

12 It is the coefficient on, say, SAT scores when everything else

13 is held constant, and, therefore, that is the marginal effect

14 holding everything else equal. That's not really the exercise

15 that Professor Arcidiacono is doing here. So these shares, as

16 I pointed out in my report, are not actual marginal effect in

17 the sense that that word would generally be used by economists

18 in a causal fashion.

19 Q. I understand you disagree --

20 A. They do not relate -- we do not normally average over

21 noncausal marginal effects, not commonly.

22 Q. I understand you disagree with Professor Arcidiacono's

23 analysis in certain places. This is your exhibit of your

24 "share due to" analysis based on what -- based on his "share

25 due to" analysis for race and ethnicity preferences, correct?

1   A.   That is right in following his methodology, regardless of

2   the fact that I do not agree with it.

3   Q.   The second-to-last number in this first panel, that 41.7,

4   gives the share due to race according to Professor Arcidiacono,

5   correct?

6   A.   Yes, according to Professor Arcidiacono's methodology, with

7   which I do not agree.

8   Q.   Okay. And the first table on this -- in this first column

9   here, that SAT number, that's higher than the number for

10   removing race, correct?

11   A.   It is.

12   Q.   And that means that in Professor Arcidiacono's model, the

13   average marginal effect of changing all African American SAT

14   scores to 400 is larger than the effect of turning off the

15   effects of racial preferences, correct?

16   A.   Given this unusual method that he's using to calculate

17   shares, comparing across different factors is a very difficult

18   thing to do because the marginal effects are computed holding

19   all other things constant. You're now saying I need to compare

20   them where you're moving only one, and you're not moving any

21   of -- you're not taking account of the cross-correlation with

22   any of the others.

23   That's why we don't do things this way. It ends up with

24   improper statistics, like saying that these shares could add up

25   to 432 percent of the total explanation. That's why we use

1 things like a Shapley decomposition.

2 Q. Let's look at the GPA one again, turning GPA to 1.0. The

3 "share due to" number there is 32.8 percent, correct?

4 A. Yes, if we accept this novel standard.

5 Q. I understand your qualifications, Dr. Hoxby.

6 That number is lower than the number for removing

7 race/ethnicity, which is 41.7 percent, correct?

8 A. Yes. But as I explained to you in one of my last answers,

9 that is not probative.

10 Q. Let's look at the next entry for percentile preferences.

11 The percent there is 30.8 percent, correct?

12 A. Yes.

13 Q. And that's lower, again, than the average marginal effect

14 of turning the race to zero, correct?

15 A. No, because you are misinterpreting average marginal

16 effect, and I -- if you want to do it -- and, again, that's

17 fine, but this is why you must do a Shapley decomposition. You

18 cannot come up with shares like this.

19 **MR. MCCARTHY:** Your Honor, Dr. Hoxby has stated this

20 over and over again.

21 **THE COURT:** Well, she is responding to your question.

22 She is not required to respond to your question the way you

23 want her to respond to your question. You ask the question.

24 She's doing the best she can to respond to the question. So if

25 she needs to repeat a statement in order to do so, I'm going to

1 allow her to do so.

2   **MR. MCCARTHY:** I understand, Your Honor. Okay.

3 Q. (By Mr. McCarthy) Let's look at the ones for Rows 5, 6,

4 and 7. This is the essay, personal quality, and activities

5 ratings -- extracurricular activities ratings, I should say.

6 And those figures are all lower than the "share due to" figure

7 for race/ethnicity, correct?

8 A. The numbers in the table are definitely lower. As I say,

9 that does not tell us about the average marginal effect, as I

10 believe you wish me to interpret it.

11 Q. Let's look down -- this is, again -- let's look down to

12 out-of-state applicants; and, again, this is Exhibit 1 of your

13 reply report. If we look down there, we say the share due to

14 race/ethnicity preferences is 91.1 percent, correct?

15 A. Yes, according to this novel metric of share. It's not the

16 average marginal effect.

17 Q. And that is higher than the "share due to" reported there

18 for GPA preferences, which is 21.1 percent, correct?

19 A. The number 91.1 is indeed higher than some of the other

20 numbers in the table.

21 Q. For example, higher than the share due to percentile

22 preferences, which is 46.4 percent, correct?

23 A. I do not accept that the shares can be interpreted as

24 average marginal effect. If they could, it would add up to

25 more than a hundred percent.

1 Q.   Higher than the share due to program rating preferences,

2 which is 14.9 percent, correct?

3 A.   Yes. I'm happy to discuss every number on the table with

4 you, but my answer is going to be the same. I do not interpret

5 these shares as being average marginal effects. They add up to

6 more than a hundred percent.

7 Q.   Higher than the share due to activities rating preferences,

8 which is 36.5 percent, correct?

9 A.   91.1 is a number that is higher than the 36.5 percent. Is

10 that the question you're asking me?

11 Q.   Yes. Higher also than the share due to performance rating

12 preferences, which is 33.4 percent, correct?

13 A.   Given the novel and unusual definition of share here, I

14 would say the numbers that you are reading from the table are

15 correct, but that these so-called shares do not represent

16 average marginal effects, which is why they add up to more than

17 a hundred percent.

18   **MR. MCCARTHY:** No further questions, Your Honor.

19   **THE COURT:** All right.

20   **MS. FLATH:** Your Honor, may I have five minutes to

21 consider redirect?

22   **THE COURT:** You may.

23   (Pause in the proceedings.)

24   **MS. FLATH:** Your Honor, I'm ready whenever you and the

25 witness are.

1   **THE COURT:** All right. You may proceed.

2   **MS. FLATH:** Dr. Hoxby, are you there?

3   **THE WITNESS:** Yes, I am.

4   **MS. FLATH:** Can you turn your video back on, please?

5 There we go. Thank you.

6   **REDIRECT EXAMINATION**

7 **BY MS. FLATH:**

8 Q. Professor Hoxby, I'd like to turn back to Exhibit 11 from

9 your deposition that you spoke about with Mr. McCarthy. This

10 was -- do you have that in front of you? We e-mailed that to

11 you.

12 A. I have it in front of me, yes.

13 Q. Thank you.

14   And Mr. McCarthy asked you about the change in accuracy for

15 admits for in-state African Americans using the definition of

16 accuracy in Professor Arcidiacono's model with racial

17 preferences and without racial preferences. Do you remember

18 that?

19 A. Correct.

20 Q. What is the change in overall accuracy on that comparison?

21 A. The change goes -- according to this measure of accuracy,

22 overall accuracy is 91 percent with the racial preferences and

23 86 percent without the racial preferences.

24 Q. And looking at Deposition Exhibit 11, which breaks it out

25 by racial group, as Mr. McCarthy took you through, what is the

1 change in overall accuracy for African Americans in state?

2 A.   It goes from 92.2 percent in this accuracy measure to

3 88.5 percent.

4 Q.   Thank you.

5   And now turning to the other category that Mr. McCarthy

6 covered with you, out-of-state African Americans, what happens

7 to the overall accuracy of Professor Arcidiacono's model when

8 you turn off racial preferences as he did following his

9 methodology?

10 A.   It goes from 91.0 percent to 86.0 percent.

11 Q.   Thank you. You can put that aside.

12   Professor Hoxby, if race was the dominant factor in the UNC

13 admissions process, do you believe that your empirical review

14 of the admissions data would have revealed that fact?

15 A.   Yes, because I was very careful to understand the

16 explanatory power of models and also to break down that

17 explanatory power into models that do ethnicity, as well as

18 other factors. It might help to explain that if the process

19 were truly formulaic, you could achieve

20 perfect (indiscernible).

21   (Court reporter requests clarification.)

22 Q.   Dr. Hoxby, can you repeat the very last portion of your

23 answer after "it might help to explain..."?

24 A.   It might help to explain that if the process were truly

25 formulaic, you would be able to find a model that fully

1 explained the admissions process. That's just the math.

2 Q. Thank you.

3 And if there was a realistic and feasible race-neutral

4 alternative that would be able to attain UNC's actual levels of

5 racial diversity and average test scores, do you believe you

6 would have found it through your analysis?

7 A. Yes, I believe so, because I made very favorable

8 assumptions toward the race-neutral alternatives. So I was

9 definitely giving them -- I was definitely giving them the

10 favorable situation in which to compare to the actuals.

11 And in addition, I considered a very wide range of

12 possibilities for how UNC would implement these race-neutral

13 alternatives; for instance, how much emphasis it would put on

14 socioeconomically disadvantaged students.

15 Q. Do any of the questions Mr. McCarthy asked you change

16 either of those opinions?

17 A. No.

18 **MS. FLATH:** No further questions, Your Honor.

19 **THE COURT:** All right. Anything further?

20 **MR. MCCARTHY:** No, Your Honor.

21 **THE COURT:** All right. Anything further?

22 **MR HINOJOSA:** No, Your Honor.

23 **THE COURT:** All right. I believe that we have now

24 finished your testimony. I want to thank you for working as

25 hard as you did to assist us in -- under these circumstances

1 and -- but at this point you are relieved. You're dismissed

2 from this. You can carry out your day.

3   **THE WITNESS:** Thank you very much, Your Honor. I'm

4 honored to have been here today to help at all.

5   **THE COURT:** Thank you.

6   **MS. FLATH:** Your Honor, the next witness that the UNC

7 Defendants call will be Dr. Bridget Terry Long, who will also

8 be appearing remotely.

9   **THE COURT:** Do we know if she is prepared to do that

10 at this time?

11   **MS. FLATH:** I believe we could use probably five

12 minutes. I think Plaintiff's counsel will switch out, and we

13 will get her connected.

14   **THE COURT:** All right. Let's take a five-minute

15 recess.

16   **MS. FLATH:** Thank you, Your Honor.

17   (A morning recess was taken from 11:52 a.m. until

18 11:55 a.m.; all parties present.)

19   **THE COURT:** Yes, ma'am, you may proceed.

20   **MS. FLATH:** Thank you.

21   Your Honor, the UNC Defendants call Dr. Bridget Terry Long.

22   **THE COURT:** Yes. Thank you. Let us have her sworn,

23 please.

24   **BRIDGET LONG, DEFENDANT UNC WITNESS VIA VIDEO, SWORN**

25   **DIRECT EXAMINATION**

1 **BY MS. FLATH:**

2 Q. Dr. Long, thank you for appearing remotely. At the outset

3 I'll note we have had a few issues with the video technology,

4 so if you can speak relatively slowly with a few pauses, that

5 will help the court reporter and all of us. But thank you in

6 advance for your patience that I know will help all of us get

7 through this.

8 A. Absolutely.

9 Q. Can you please state your name for the Court and where you

10 work?

11 A. Yes. My name is Bridget Terry long, and I am the dean of

12 the Harvard Graduate School of Education.

13 Q. Thank you.

14   Did you prepare a set of slides to assist in providing your

15 testimony today?

16 A. Yes, I did.

17   **MS. FLATH:** Your Honor, that's DX507. We've provided

18 hard copies.

19   **THE COURT:** Yes.

20 Q. (By Ms. Flath) Dr. Long, I'd first like to talk about your

21 background, certain aspects of which are highlighted on Slide

22 1. Can you give us a brief, 30-second description of your

23 personal background through high school?

24 A. Sure. So my family is actually from southern Virginia, but

25 I grew up -- born in Baltimore, moved to the Midwest, where I

1 went through public education before going to Princeton as an

2 undergraduate. Education was always very important in my

3 family. My parents were nontraditional college students,

4 meaning they went as older students, my father after the Air

5 Force. And so we took -- education was, again, just vitally

6 important. My parents worked very hard so that I could have

7 opportunities and not take for granted what was made available

8 to me.

9 Q. Did you receive a degree from Princeton?

10 A. Yes, I did.

11 Q. And what was that?

12 A. I completed my bachelor's degree at Princeton, and I

13 majored in economics.

14 Q. Please walk us through the rest of your educational

15 background.

16 A. Sure. After Princeton, I went to Harvard University, and I

17 was in the Department of Economics where I got both -- my

18 master's degree, and I completed my Ph.D. in 2000.

19 Q. And after receiving your Ph.D., where did you work?

20 A. So after completing my degree in the economics department,

21 I moved over to the Harvard Graduate School of Education, where

22 I've been a faculty member since 2000.

23 Q. And what positions have you held at the Harvard Graduate

24 School of Education?

25 A. So I -- as a faculty member, I have focused on research and

1 teaching. I moved from assistant professor, was promoted to

2 associate professor, and then received tenure as a full

3 professor, and then more recently received an endowed chair,

4 which is an honor, the chair professor of education and

5 economics.

6   Since reaching that level, I also serve as faculty director

7 of the research doctoral program. This is our DDP, indicating

8 a Ph.D. program. I moved further into academic leadership and

9 administration as academic dean for four years. This is the

10 second highest level at the Graduate School of Education. So I

11 was in charge of academic programs, student supports. And then

12 for the last two and half years, I have served as the dean of

13 the Graduate School of Education.

14 Q. Thank you.

15   Have you been appointed to any positions in the education

16 space?

17 A. Yes, I have. So I was appointed by President Obama and

18 confirmed by the United States Senate to serve on the National

19 Board of Education Sciences. This is the board that oversees

20 and advises on the research functions of the Department of

21 Education, part of IES, or the Institute of Education Sciences.

22 I served as a member, vice chair, and then I served as the

23 chair of that board for two years.

24 Q. Thank you.

25   Generally speaking, what does your research focus upon?

1 A. So my research, using economics as my field, has focused on

2 college access and success, so the transition from high school

3 to higher education and then into the labor market.

4 Q. And I think you mentioned this, but what types of courses

5 have you taught at both the graduate and undergraduate level?

6 A. So my courses have mostly been at the graduate level -- but

7 I have welcomed undergraduate -- and they have focused on the

8 economics of higher education broadly, so the factors that

9 influence whether students apply, enroll, what determines their

10 outcomes in higher education, as well as looking for -- at the

11 supply side, so how higher education institutions make

12 decisions, how they grapple with limited resources, how they

13 try to improve student success. And in my courses, another

14 important part has been policy, whether that's federal policy,

15 state policy, individual initiatives, and policies to try to

16 support students.

17 Q. Thank you. Dr. Long, we're hearing you well. If you could

18 speak just a tiny bit slower, I think our court reporter would

19 appreciate it.

20 A. I'd be happy to do that. And thank you for letting me

21 testify virtually. It's difficult circumstances, so I

22 appreciate the opportunity to appear before you this way.

23 Q. We're glad to have you.

24   As a result of your professional background, do you have

25 other experience with issues relating to higher education and

1 college admissions?

2 A.   Yes, I do. I have served on admissions committees at the

3 Harvard Graduate School of Education; but more than that, I

4 have taught many years, 16 years, I think, to be exact, about

5 issues with admissions, the problem of universities grappling

6 with how to decide which students to choose given the

7 admissions tools that they have. Many of my students have

8 worked in admissions, so I've invited their perspectives, and

9 I've also taught in professional education, so sitting

10 admissions officers. And then, finally, I've consulted with

11 colleges and universities who have been grappling with ways to

12 improve their admissions processes in particular to try to help

13 low-income students.

14 Q.   Thank you.

15   And have you published academic papers in your areas of

16 study?

17 A.   Yes, I have published many papers.

18 Q.   Have you testified as an expert witness in litigation

19 before?

20 A.   No, I have not.

21 Q.   Have you testified to Congress before?

22 A.   Yes, I have testified four times to congressional

23 committees, most recently to the Senate Health Committee, which

24 is the committee that focuses on education. I did so in late

25 September related to FAFSA, or the federal financial aid form.

1 Q.   Thank you. Let's turn to the specifics, the topics you

2 were asked to opine upon here.

3   At a very high level, what questions were you asked to

4 consider in this case?

5 A.   Sure. So first I was asked to survey the universe of

6 race-neutral alternatives that either have been implemented by

7 universities or hypothesized in the academic literature or that

8 were mentioned in the complaint.

9   The second thing I did was, based on that survey, I opined

10 whether some of these potential race-neutral alternatives

11 should be considered by the university, as well as I

12 highlighted important factors to keep in mind as they were --

13 as they consider or evaluate these alternatives.

14   And then finally, I was asked to review and respond to some

15 of the opinions and assertions by Mr. Kahlenberg.

16 Q.   And to help the Court frame your opinions and testimony

17 today, are there certain topics you will not be discussing?

18 A.   Yes. And so as outlined on the slide, my -- while I make

19 recommendations based on the research literature, I am not

20 making an evaluation if any particular race-neutral alternative

21 or simulation, what the impact of that might be at the

22 university.

23   Second, I am not suggesting or telling the university what

24 they should absolutely implement or do. Again, I'm presenting

25 the evidence of possibilities and recommendations on what they

1   might consider.

2   And then, finally, I do not speak at all about what the

3   current role of race and ethnicity is within the university's

4   admissions process.

5   Q.   Thank you.

6   Let's turn to Slide 4 of DX507; and with respect to the

7   first question that you considered, at a high level what

8   opinion did you reach?

9   A.   So based on my survey of the research, both what

10 universities have attempted to do as well as what have been

11 hypothesized by academics in the literature, I opined on those

12 results and again highlighted key factors that help to

13 determine the effects of possible race-neutral alternatives.

14 Q.   And briefly, what -- when you say you did a survey, what do

15 you mean?

16 A.   So I looked extensively throughout the literature. There

17 are -- there have been years -- over a couple of decades of

18 research reports that have been published in peer-reviewed

19 journal articles, which is the highest standard in our field,

20 book chapters, policy reports, as well as working papers,

21 conference presentations. So I looked very broadly to try to

22 capture any evidence, discussion or research related to the

23 scope of my work.

24 Q.   And just to be clear, when you use the word "evidence,"

25 you're discussing those external sources, not any of the

1 evidence produced by UNC in the litigation, correct?

2 A.   That is correct.

3 Q.   Thank you.

4   Turning to your next slide, Slide 5, which you titled "Key

5 Factors in Assessing Race-Neutral Alternatives," please explain

6 what you consider those key factors to be.

7 A.   Yes. So the really important thing in looking at the

8 research and experience of universities is that the details

9 matter; the quality, the relevance of the evidence being

10 paramount in helping us decide just how convincing the evidence

11 is, what we know, what we might suspect, and what has not been

12 answered.

13   And when I say the quality of the evidence, first I'm

14 talking about the data: So are the data detailed? Are they

15 comprehensive? Are they the kind of measures that an

16 admissions committee might use or have as they are making

17 decisions?

18   The second is studies oftentimes will make assumptions, and

19 so I look at whether or not the study is characterizing

20 something that is feasible for an admissions committee -- for

21 the process, again, information they might have.

22   And then in studying what is the impact of some of these

23 potential race-neutral alternatives, it is important to look

24 not only at the short-term effects, so what might happen one

25 year after a policy is implemented, but also the long-term

1 effects over time, in particular because there can be indirect

2 effects. By this I mean when you change a policy, you may also

3 be changing incentives and student behavior or family behavior,

4 which is going to influence who ends up in the applicant pool;

5 and it's important to take that into account if you're really

6 going to understand the impact of a policy.

7 Q. Thank you.

8 A. The second --

9 Q. Please go ahead.

10 A. Should I -- okay. And I hope my pace and clarity is coming

11 through.

12   Okay. The second very important thing to take into account

13 is the context and the institutional characteristics. So as we

14 find in many parts of education, it's not one size fits all. A

15 policy that might work well for one institution, one district,

16 may not work well for all districts. And we need to pay

17 attention to contextual factors, such as, you know, what state

18 is the institution in, what's the composition of the

19 communities around this institution as well as the

20 characteristics of the college or university. Those two

21 factors, both context and institutional characteristics, can

22 influence how we interpret the results from any kind of study.

23 Q. And keeping these factors in mind, walk us through the

24 conclusions that you reached as a result of your survey of the

25 literature and the experience of institutions that have

1 implemented race-neutral alternatives.

2 A. Yes. So the first conclusion builds from what I just said,

3 and that is you can see, given many studies, many different

4 simulations, that the effect of any race-neutral alternative

5 seems to be related to institutional characteristics and

6 context. We see different results in different places because

7 of these -- these factors. So context and institutional

8 characteristics matter.

9   The second is a general statement about proxies. Proxies

10 are only going to reproduce racially and ethnically diverse

11 student bodies if that proxy tracks closely with race or

12 ethnicity, or if it's highly correlated with race or ethnicity

13 is another way of saying that. The degree --

14 Q. Just briefly --

15 A. I'm sorry.

16 Q. Just to be sure we're on the same page, what do you mean by

17 a proxy?

18 A. Sure. So if we are looking at race-neutral alternatives,

19 so if we are not going to consider race or ethnicity, we are

20 using some other measure; and I'm calling this, just

21 summarizing it from the literature, a proxy.

22   Now, that proxy is only going to reproduce racial and

23 ethnic diversity if it's tracked closely with the thing that

24 we're no longer measuring, i.e., in this case race. So, again,

25 whether or not a proxy is successful as a race-neutral

1 alternative -- so using some alternative measure, but not race

2 or ethnicity, that measure is only going to be as successful in

3 recreating racial and ethnic diversity if it is highly

4 correlated with race.

5   So my third conclusion is when you look at the efforts of

6 selective universities, things that they have tried, as well as

7 simulations, what you find is the race-neutral alternatives,

8 again, that have been tried or hypothesized have not been

9 successful in accomplishing their intended goals.

10 Q.   And how do you define successful?

11 A.   So I am drawing from the literature and how researchers

12 have looked at this question. Oftentimes they're looking at it

13 from are we able to replicate the level of racial and ethnic

14 diversity that the institution had previously, but you also see

15 researchers investigate issues of academic rigor in the

16 admissions process. So this comes out in some of the research

17 about Texas.

18   So I am not being -- I'm not defining narrowly success.

19 I'm just drawing from the research and how researchers have

20 used multiple measures and how universities have spoken

21 about -- you know, reflected on whether or not they feel a

22 race-neutral approach has been successful.

23 Q.   And what was the fourth conclusion that you've got here on

24 Slide 6?

25 A.   Sure. So the fourth conclusion is the fact that there are

1 many research studies that are hypothesized ideas, simulations,

2 thought experiments about what might be possible; but many of

3 them are not feasible or they would be incredibly difficult for

4 institutions to actually try to implement. So looking at those

5 details, you know, this category -- again, I think most of them

6 are much more thought experiments than things that we could

7 actually implement.

8 Q. So with these conclusions from your survey in mind, what

9 was your next opinion that you reached in this case?

10 A. Yes. My next opinion -- so based on this review, I did

11 identify race-neutral alternatives that I suggested the

12 university consider, but I also included other factors that

13 they should consider as they explore these alternatives.

14 Q. And the Court has heard from both Mr. Kahlenberg and

15 Professor Hoxby, so some familiarity with the concept of a

16 race-neutral alternative at this point. But generally, what

17 categories of race-neutral alternatives do you discuss in the

18 context of this opinion?

19 A. So the two main ones that I recommended the university

20 consider: First are place-based admissions preferences, and

21 then the second category are focused more on socioeconomic

22 status.

23 Q. Thank you.

24   Let's start with those place-based race-neutral

25 alternatives. And if you turn to Slide 8 of DX507, can you

1 please walk us through this slide?

2 A.   Okay. First, just to start, to define place-based

3 alternatives, the percentage plans that were implemented by

4 Texas, but also California, Florida, they are giving

5 preferences based on some geographical location. So percentage

6 plans were based on, you know, having a class rank in the top

7 10 percent in Texas, for example, but they could also be

8 defined based on some other geographical marker, such as a ZIP

9 code. We could give preferences across ZIP codes as an

10 alternative way in our admissions processes.

11 Q.   And what other conclusions or considerations do you

12 highlight with respect to these place-based race-neutral

13 alternatives?

14 A.   Yes. So there is rich literature here with many people

15 exploring these issues, and the basic conclusion is that

16 place-based race-neutral alternatives only work if you have a

17 high degree of segregation.

18   So I've shown on the slide what you need in order for it to

19 work is high schools that are mostly made up of one ethnicity

20 or another -- so you have the green, the orange, and the

21 blue -- so that when you're giving preferences by those

22 geographical areas or high schools and you're drawing together

23 a student body, you get racial and ethnic diversity. So

24 segregation is a really important factor in determining whether

25 or not place-based alternatives reproduce racial and ethnic

1 diversity.

2 Q.   Let's talk now about some of the institutions that have

3 implemented percentage plans.

4   On Slide 9, can you please explain your conclusions with

5 respect to those concepts?

6 A.   Yes. So my first conclusion is that universities that have

7 actually tried to implement percentage plans have struggled to

8 maintain racial and ethnic diversity.

9 Q.   Which institutions?

10 A.   Shall I give you an example?

11 Q.   Yeah, that would be great.

12 A.   Yeah. So, again, this is very rich literature. Most -- or

13 a great deal of research has been done on the experience in

14 Texas, where they implemented a percentage plan in the late

15 1990s; and the consensus across many different researchers

16 using many different data sets has been that they've only had

17 limited success.

18   And there's an important caveat here. So researchers have

19 looked, after they implemented the percentage plan, and one

20 measure of whether or not that plan had been successful was to

21 compare the student body composition both before and after the

22 policy.

23   A key factor that you have to keep in mind when you're

24 studying policy in the real word, particularly education

25 policy, is that when you change your policy, the world keeps

1 spinning. Many, many things are changing at the same time.

2 You know, we unfortunately, or fortunately, don't have the

3 circumstance if we were in a laboratory -- a science laboratory

4 where we could change one thing and hold everything else

5 constant. We are studying these policies within a larger

6 context in social science, and this is what economists spend a

7 great deal of time trying to isolate, what is the impact of the

8 policy given all the other changes that are going on.

9   So coming back to the Texas example, when they implemented

10 the percentage plan, there were other things that were changing

11 at the same time in the state. What several researchers have

12 noted in the discussion of their analysis is that the

13 composition of the population was also changing at the same

14 time. In fact, the percentage of students who were coming from

15 black and Latinx backgrounds was increasing at the same time

16 that Texas was implementing the percentage plan.

17   So the question that researchers have highlighted -- and,

18 again, this has been seen in multiple studies -- is: When we

19 see after the percentage plan that there was a similar racial

20 and ethnic diversity level, do we take that as a success, or

21 how much of that was related to the changing population? In

22 fact, if the population of students of color is increasing,

23 some would expect, at least directionally, diversity at that

24 university should have increased if that race-neutral approach

25 was successful.

1   So this is what I mean when I say limited success with a
2 real asterisk there and question mark about how much was this
3 the policy versus how much was this the changing conditions of
4 the state.
5 Q. Dr. Long, are you aware that Mr. Kahlenberg recently
6 testified that certain of the California schools, including
7 UC-Berkeley and UCLA, just enrolled their most racially diverse
8 classes ever?
9 A. Yes, I am aware of that. And so California is another case
10 that implemented a percentage plan in the late 1990s different
11 than Texas -- it was the top 4 percent of students -- but
12 really strong consensus across researchers that they were not
13 successful in maintaining a high level or similar level of
14 racial and ethnic diversity.
15   So now Mr. Kahlenberg has noted the fact that their
16 diversity levels are going back up. But realize, this has been
17 a 20-year gap. So it's 20 years that the race-neutral approach
18 that California was using did not produce the racially and
19 ethnically diverse student bodies they had previously.
20   It really calls into question -- given everything that has
21 changed in California over the last 20 years, I don't think
22 that we give credit to a policy -- a 20-year-old policy that
23 now all of a sudden -- you know, I think there is a lot of
24 skepticism that it is responsible for California having a
25 racially -- you know, more diversity than they have had in the

1 past.

2   And, you know, we'll have to see long-term whether that

3 trend sustains or not. You know, one blip compared to 20 years

4 of data where it has not reproduced high levels of racial and

5 ethnic diversity really makes us call into question, you know,

6 the details of that.

7 Q. What was the next point that you made on the slide?

8 A. So the second point is that institutions that have

9 implemented percentage plans have also expressed concerns that

10 it limits their ability to consider certain factors in

11 admissions. So with a percentage plan, you're giving

12 preferences to you being in the top 10 percent of your high

13 school.

14   At university -- at UT-Austin in particular, officials

15 there complained that it was giving away too much of their

16 freedom. They felt very hamstrung in terms of filling the

17 class and that they had to ignore these other important factors

18 of academic achievement. And so they successfully petitioned

19 the state legislature, I believe in 2009, so after about 10

20 years of being with this percentage plan, to get more

21 flexibility and move away from the percentage plan because it

22 was hurting some of their other institutional goals.

23 Q. And, Dr. Long, in your role as a trained economist, do you

24 also consider yourself to be a bit of a social scientist?

25 A. Absolutely. Economics is strongly in social science, yes.

1 Q. So why, from that perspective, do the indirect effects of a

2 policy change matter?

3 A. So this, again, is getting to, you know, we have a policy

4 that is meant to change one thing, but we've changed the entire

5 ecosystem. And so, as I said in my background, I spend a lot

6 of time studying how people make decisions and their behavior.

7 Others have as well. It's a big part of economics.

8   And what people found, in particular with Texas, is when

9 you all of a sudden said, "We are going to give preference

10 according to being in the top 10 percent," there were some

11 families for whom their child might have been top 11 percent,

12 top 12 percent, and they had all of a sudden this incentive to

13 change high schools because then their students, if they chose

14 the right high school, would get these admission preferences.

15 So you have several studies that actually document this kind of

16 behavior.

17   So, again, when we have a policy, we're not changing just

18 one thing, and we have to consider how we might be changing

19 incentives and behavior. And so this is a -- this is something

20 that researchers have found have actually mitigated the

21 intended effects of the percentage plan policy.

22 Q. Thank you.

23   Let's turn now to the other form or category of a

24 place-based race-neutral approach that you mentioned,

25 geography-based plans.

1   What considerations did you highlight with respect to

2   geography-based plans?

3   A.   Yes.   So the geography-based plans are an extrapolation.

4   In particular, there is a paper done by actually a colleague of

5   mine at Harvard which is really a thought experiment about what

6   if we gave preferences according to ZIP code. But it is a

7   paper that is completely hypothetical, and she doesn't present

8   any quantitative evidence about what the effects of this might

9   be.   So, again, this is really in the category of a thought

10 experiment about what this might mean, but without any kind of

11 evidence on how this might impact diversity.

12   But, again, similar to the percentage plan, in order for it

13 to be successful, there would have to be a high level of

14 segregation across ZIP codes in order for that -- that kind of

15 preference to produce a racially and ethnically diverse student

16 body. And, in fact, we have greater concerns about a ZIP

17 code-based plan than a percentage plan that families would

18 again game the system or their behavior would change according

19 to these preferences, because in the case of ZIP codes, you

20 could easily change ZIP codes to try to better the chances for

21 your child without even changing their school, without changing

22 your job. It would be easier to make those kinds of

23 adjustments in order to give preferences for your child. And

24 so, again, we worry even more with this geography-based plan

25 that there would be problems.

1   And then finally, as I noted before, the feeling of

2 admissions committees not -- or having to ignore other

3 important indicators about a student's achievement or

4 leadership, having to disregard that under this plan, that same

5 problem would exist in this kind of geography-based plan.

6   **MS. FLATH:** Your Honor, this might be a good breaking

7 point for the lunch break.

8   **THE COURT:** All right. Let us recess until 1:30.

9 Thank you.

10   (A noon recess was taken from 12:27 p.m. until 1:30 p.m.;

11 all parties present.)

12   **THE COURT:** You may resume.

13   **MS. FLATH:** Thank you, Your Honor.

14 Q. (By Ms. Flath) Dr. Long, let's turn to Slide 11 of DX507.

15 A. Okay.

16 Q. Before we turn to the slide and start talking about the

17 socioeconomic status-based plans, how does your research and

18 professional experience relate to issues of socioeconomic

19 status and access to higher education?

20 A. Yes. So much of my work and why I went into economics has

21 been motivated by trying to better support and improve the

22 outcomes for low-income students. I think this comes from just

23 my background and trying to understand hardworking people -- we

24 don't want to waste the wonderful potential -- and how can we

25 make our systems better in supporting low-income students.

1   So my research started with focusing on affordability,

2   obviously a concern for low-income students. I did a number of

3   research papers on financial aid; and then I moved to focusing

4   on academic preparation, which is another challenge that

5   low-income students face; supports, how to help them prepare

6   for college; and then moved on to really focusing on

7   information -- in the role of information and helping to

8   support low-income students with their choices and navigating

9   higher education.

10   So I would really say the bulk of my work has focused on

11   low-income students or, thinking more broadly, lower

12   socioeconomic status students and their families.

13   Q. Do you recall when the idea of using socioeconomic status

14   as a proxy for race first started to be discussed with respect

15   to college admissions?

16   A. Yes, absolutely. So this surfaced as an idea in the early

17   2000s. So this is after I finished my Ph.D. I was an

18   assistant professor deep in research; and as we got better

19   data -- so the last 20 years especially we've gotten such

20   better data to understand what is happening to students, what's

21   happening in institutions. And the observation of just how

22   underrepresented low-income students are at selective

23   institutions was highlighted. And then the idea was put

24   forward to give admissions preferences to low-income students

25   to help diversify selective institutions in terms of

1 socioeconomic status.

2   There was then the leap to say, well, if we had preferences

3 according to SES, we might also be able to accomplish our goal

4 in terms of having racial and ethnic diversity. So this was

5 very attractive to myself, and I think to many in the field,

6 that maybe we could accomplish these two different goals,

7 having diversity by income and having diversity by race and

8 ethnicity, kind of in one policy, and that it would be much

9 cleaner. And so you saw a number of people using all kinds of

10 data, looking at all kinds of institutions to explore whether

11 or not this was a possibility. You know, it was the state of

12 let's look at the evidence and see what's possible.

13   But very, very quickly, again, researchers from across the

14 board, economists, sociologists using lots of different data

15 sets kept coming to the same conclusion, that you couldn't get

16 racial and ethnic diversity from an SES-based plan.

17 Q. So let's turn now to Slide 11. Can you please explain this

18 to us?

19 A. Sure. So, again, this was such an attractive idea. When

20 the results were coming out that you couldn't accomplish racial

21 diversity with an SES plan, there was investigations into why

22 that was the case to better understand what's behind this

23 policy, and so that's what this slide is presenting.

24   So in order for an SES-based plan to work, whatever measure

25 you're using -- and people have tried lots of different ways of

1   measuring socioeconomic status -- has to be very highly

2   correlated with race in order for you to get diverse outcomes.

3   Now, it's well known that, unfortunately, many African American

4   families are low income. Many students applying to college who

5   are black are coming from low-income backgrounds. It's also

6   the case for Latinx students. And as you can see from the

7   slide -- this is just pulling some data from the U.S. Census

8   for the United States, and you can see that many families of

9   color are low income.

10   But the key to an SES-based admissions policy is looking at

11 the whole pool of students who are coming from low-income

12 backgrounds; and when you do that, you realize, even though

13 many low-income students are black or Latinx, the majority of

14 low-income students are white. So if you were going to have a

15 policy that gives preferences according to SES, you're still

16 going to be choosing more white students than you are students

17 of color.

18   So the punch line is, you know, these SES-based plans, what

19 people were finding in their simulations are explained by the

20 fact that most poor students are white.

21 Q. So turning to Slide 12, what considerations did you

22 highlight with respect to socioeconomic status-based plans?

23 A. So to make clear, no university has actually implemented an

24 SES-based plan that has replaced an holistic, race-conscious

25 admissions approach. So there has been a movement to try to

1 increase the representation of low-income students at selective

2 institutions, a very important goal, but they have not been

3 used in actual practice to replace race-conscious admissions.

4   A second thing that I concluded from this -- and, again,

5 because this has not actually been done by a university, many

6 of these studies are hypothetical. They are simulations. Some

7 of them are thought experiments, and while they are interesting

8 and kind of push the field thinking about this theoretically,

9 they provide limited insights about what might actually be

10 feasible for colleges and universities to implement.

11   For example, many of the hypothesized kind of plans and

12 approaches that researchers have put forth require data that an

13 admissions committee wouldn't have or they're making

14 assumptions that are not reasonable for the real world. When

15 they are putting simulations together about how admissions

16 might work, they're using models that just don't -- don't look

17 at all like what real admissions offices and how they do their

18 work, what they look like.

19   Would you like for me to give you an example?

20 Q. An example would be great.

21 A. Okay. So -- so one very nice study, but, again,

22 hypothetical simulation, really a thought experiment, is by

23 Carnevale. So they're using this detailed data. It's not

24 administrative data. It's an external data set where it was

25 designed for a different purpose, so it gives a great deal of

1   information about wealth and background. And they make -- so,

2   again, data that an admissions committee would not have.

3   In that study, they make the assumption that students would

4   apply to all 190-plus selective colleges and universities.

5   Students don't apply to 190 universities.

6   They then make the assumption that the universities would

7   then take this large pool of students and rank them and then

8   somehow a sorting mechanism would work to figure out who should

9   go to what college.

10   That's what I mean, it's a thought experiment, but it does

11 not at all resemble applications by students or how

12 universities make their decisions, and it's also based on data

13 that admissions committees don't have access to.

14 Q. So let's -- before we turn to your third opinion, one more

15 question on sort of your affirmative review. You reviewed

16 percentage plans, geography-based plans, and socioeconomic

17 status-based plans and observed no institution has been able to

18 successfully implement them, but yet you recommended that UNC

19 consider them. Why is that?

20 A. Yeah. So this is a weighty, important matter. It is

21 something where we have over two decades of people thinking

22 about these issues, trying new things; and so as the university

23 approaches this issue, my hope and in the role that I'm playing

24 is to give them an overview of the best of what we know: What

25 are the lessons from the research; what have people tried; and,

1   importantly, what have been some of the determinates that

2   affect the outcome of the different race-neutral approaches

3   that people have considered.

4   So I recommended to the university to consider those

5   race-neutral alternatives, but I was also clear in sharing the

6   lessons learned from universities and from the research about

7   why these have not been successful, things they might consider,

8   because I think it's important as we go about our work whenever

9   we're trying to have a policy or a program to have some

10   understanding about the factors that might increase the

11   success; or if we're finding that it doesn't work, why that

12   might be the case, to understand the mechanisms underneath.

13   So, again, my role -- the scope of my role was to just

14   provide those lessons and the full knowledge to give a

15   comprehensive review of the lessons that are learned. So while

16   I'm not optimistic, because we have not seen these race-neutral

17   approaches work for other institutions, here are things to try,

18   here are things to consider, here are some of the complexities

19   that are involved that other universities or researchers have

20   found.

21   Q. So let's turn now to Slide 13 to your final opinion in the

22   case.

23   A. Yes. So my final opinion is, responding to

24   Mr. Kahlenberg's assertions, I find that he makes a number of

25   overstatements about race-neutral approaches and about the

1 potential success that these alternatives might have for the

2 university.

3 Q. And before we turn to your view of his conclusions, do you

4 know Richard Kahlenberg?

5 A. We have interacted in the past. In fact, around the time

6 when I was writing my first expert report, he invited me to be

7 on a working group with him that focused on community colleges

8 and finances. I think there's overlap because we both have

9 done a great deal of work and paid a lot of attention to how to

10 help low-income students.

11 Q. Turning to Slide 14, keeping in mind that you did not

12 review the empirical results of his simulations, at a high

13 level what are your critiques of his opinions in this case?

14 A. Yes. So I paid particular attention to his interpretation

15 of the evidence and the research that's already out there. I

16 find that he overstates how effective race-neutral alternatives

17 have been or would be because he's not paying attention to the

18 details. In particular, he fails to account for the quality or

19 the relevance of the research or the particular data used, and

20 I also find that he doesn't pay particular attention to context

21 and how important the context of the university and the

22 institutional characteristics are and how that influences the

23 results of any kind of race-neutral approach.

24   I also find that some of the statements that Mr. Kahlenberg

25 makes really could not be implemented because they're not

1 feasible, in particular data that just are not available to

2 admissions offices. So in reality, they would have -- they

3 would not be able to implement what he suggests.

4 Q.   Moving to your first critique regarding his views on the

5 effectiveness of the race-neutral approaches, can you please

6 walk us through Slide 15?

7 A.   Yes. So Slide 15 is attempting to summarize a bit more of

8 the details about the research that I chose to be more

9 convincing, that the field has put more weight on versus some

10 of the less rigorous studies that Mr. Kahlenberg cites in his

11 work.

12   So if you look on the left in blue, some of the more

13 rigorous studies, for example, are using much more detailed

14 data. So the M. Long -- that's Mark Long, no relation -- the

15 M. Long and Tienda study, which is focusing on Texas, is using

16 a great deal of administrative data from Texas, detailed data

17 that institutions have, looking both pre- and post-policy

18 change; and they also consider these indirect effects, which

19 include how we think about whether or not a percentage plan has

20 been successful.

21   The Bowen paper -- or book uses data from 18 different

22 selective institutions, three of them being public

23 institutions, which would be relevant here, and they tried

24 multiple simulations, multiple ways of defining SES and how it

25 might be used in admissions process. So it's a very thorough

1   investigation of an SES-based plan.

2   And the Reardon paper there, again, using really

3   comprehensive data with the explicit purpose in the paper of

4   trying to replicate what data admissions offices have in their

5   work, it is also considering not only indirect effects, but it

6   considered what would happen if more than one university

7   changed their policy, if it wasn't just one, but multiple,

8   because this would change the whole ecosystem. And we need to

9   consider those effects as we try to predict what would happen

10   with different policies.

11   In contrast, if you look on the right side of the slide in

12   brown -- I mentioned the Carnevale study just a moment ago, the

13   unrealistic expectation that the students are going to apply to

14   all the 193 colleges and then using very limited data, data

15   that was actually collected for a different purpose, not data

16   that an admissions committee would have.

17   The Gaertner study is focused on the University of Colorado

18   at Boulder. This is a study where it's only using one year of

19   data from one cohort, and it's not using the entire set of

20   applicants. It's using a subset; and the paper is not really

21   clear of how it determined that subset, is it representative of

22   the entire group of applicants.

23   And then it's a study that is taking place during an

24   unusual year, so 2009. We have -- we get very concerned about

25   that because 2009 is when we were going deep into a recession,

1   and we know students' educational decisions change in a

2   recession, their family situation changes in a recession. So

3   it's hard to extrapolate from a subset of one year of data

4   during a special year that this has some kind of general

5   reliable effect that might apply elsewhere.

6   They're also in that study using an SES measure that is not

7   feasible. In fact, the authors admit in the study -- they

8   write that these are data that admissions committees don't

9   ordinarily have. And then UC-Boulder is different from

10   UNC-Chapel Hill in terms of characteristics, which is another

11   issue that comes up in the Kahlenberg/Potter.

12   So, again, these are some examples of how the details

13   matter greatly and whether the evidence that we find is

14   convincing or not.

15   Q.   You mentioned Kahlenberg and Potter. Let's turn to Slide

16   16, which discusses that.

17   A.   Yes. So Slide 16 summarizes a number of institutions that

18   Kahlenberg and Potter discuss in their chapter, and reorganizes

19   it according to one institutional characteristic, so their

20   acceptance rate, their acceptance rate being one leading

21   indicator of their selectivity.

22   So to be clear, this paper -- I believe it was a book

23   chapter. It's not a peer-reviewed journal article, meaning it

24   hasn't gone through a referee process at the same level as a

25   number of the articles that I use. There are a number of

1 tables looking at different cases of institutions, but there's

2 not the same level of rigor in considering indirect effects,

3 short term, long term, what else was going on in these cities

4 during the time of these policy changes. So it's just a very

5 different piece of work.

6   But if we take as given their conclusions, Kahlenberg and

7 Potter, Kahlenberg, in particular, deems certain institutions

8 have been successful using race-neutral approaches while others

9 have not: Michigan, UCLA, and UC-Berkeley. And what you see

10 is the more selective institutions, the ones that are the most

11 similar to UNC-Chapel Hill, are the ones who were not

12 successful with the race-neutral approach.

13 Q. Your final critique of Mr. Kahlenberg relates to his

14 definition, effectively, of socioeconomic status. Can you walk

15 us through your opinion on that front?

16 A. Yes. The first point I want to make is that in an

17 admissions practice, what institutions are striving to do is be

18 need blind. This is an important part of practice. It means

19 that when someone applies to the college or university, we

20 aren't taking into account their ability to pay. The worry

21 would be institutions would have some incentive to only accept

22 students who can afford to pay. That means less financial aid

23 for them. They might be more likely to come and persist. So,

24 again, the standard that colleges and universities have -- they

25 strive for in order to be as fair as possible to low-income

1 students is to be need blind.

2   So the first thing I would note is if we moved to an

3 SES-based plan, we are going counter to this goal of protecting

4 low-income students in admissions. So that's the first thing

5 that I would underscore. It's a fundamental change to how

6 admissions committees do their work or how they strive to do

7 their work to not disadvantage low-income students.

8   But the second major point is that Mr. Kahlenberg relies on

9 a broad definition of SES that requires information on a

10 family's wealth that is not available to admissions offices and

11 so could not actually be implemented. So -- I'll pause there.

12 Q. You've got two points underneath this observation. Can you

13 please explain those?

14 A. Sure. The first is, yes, if we are to measure

15 socioeconomic status and to do a good job with it, we do strive

16 to include measures of wealth because income can change from

17 year to year. But wealth is really a measure of the safety

18 net, of the stability of a family; that when crises or

19 emergencies hit or you're trying to make more investments for

20 your child, for your family, that really comes from wealth. So

21 income, generally speaking, is not a sufficient measure for

22 SES. Unfortunately, though, wealth information is not

23 available to colleges and universities for many applicants,

24 which makes it problematic in trying to implement an SES-based

25 program.

1 Q. Your next slide, Slide 18, discusses the FAFSA in some

2 detail. What is your experience with the FAFSA?

3 A. So a great deal of my research has focused on the FAFSA.

4 As I mentioned, I was just asked to testify before the Senate

5 Health Committee about the FAFSA. This is the second time I've

6 been asked to do so.

7   In my work and in trying to find ways to support low-income

8 students, one observation that has been made by many educators

9 and nonprofit organizations is that the FAFSA has been a

10 barrier. So I have spent a great deal of my time, several of

11 my largest projects have focused on ways to try to increase

12 low-income students using the FAFSA or ways that we might

13 simplify the whole federal financial aid process to better

14 match students with the financial aid that is available to

15 them. So I am very familiar with the FAFSA and have worked

16 with it a great deal.

17 Q. Can you please walk us through your slide here?

18 A. So the first point is Mr. Kahlenberg makes the assertion

19 that universities could use the FAFSA, again, this federal

20 financial aid application, to get information about wealth.

21 That's just not true.

22   So the first issue is many students don't complete the

23 FAFSA. Again, this has been a major focus in my work. Many

24 students don't know that the FAFSA exists. Many low-income

25 students, families we have spoken to in my work, they don't

1 realize you need to fill out the FAFSA in order to get

2 information about financial aid eligibility. So this has been

3 a major problem in higher education policy, not everyone

4 completes the FAFSA. It is also the case for upper-income,

5 middle-income folks. If they're not applying for financial

6 aid, many of them also do not complete the FAFSA. So one

7 problem -- one major problem is not everyone completes the

8 form.

9   The second major problem in terms of trying to measure

10 wealth using the FAFSA is the FAFSA has several wealth

11 questions, but anyone who makes less than $50,000 does not have

12 to complete them. This has been part of the process of trying

13 to simplify the form for students. The low-income students get

14 to skip those wealth questions or, really, anyone who has made

15 less than $50,000. So we would have no information from that

16 category of students.

17   The third point is the wealth questions -- and, again,

18 there are just a few that are on the form. One thing the FAFSA

19 tells families to do is to exclude their home value. So there

20 was a decision made -- a policy decision made not to count a

21 family's home as part of their assets, but we know for most

22 families, that is the most important source of wealth that they

23 have, their home value. And I have some unpublished research

24 where we actually see when that change was made, families could

25 easily hide savings by paying off their mortgage, adding to

1 their home value. But we get no information about home value

2 from the FAFSA.

3   And then the final point is even on the FAFSA, the income

4 information, the wealth information that is shared, it's very,

5 very limited. First, it's only one year of information. It

6 gives us just one small snapshot of the financial circumstance

7 of a family. And the second point is it focuses on one prior

8 year.

9   So let me give you an example. So if we have a student who

10 was applying to college right now and they hoped to start next

11 fall, Fall 2021, it used to be that they would report their

12 family income and those wealth measures for the year 2020.

13 There was a change in the way that we do financial aid several

14 years ago where it is prior-prior year, which means they report

15 their income from 2019. So, again, a high school senior

16 applying for financial aid in admissions right now to attend

17 college in Fall 2021 is reporting now 2019 family income

18 information.

19   That's the gap in the prior-prior year. Certainly lots of

20 things, as we've seen in 2020, can change for a family in

21 between those time zones; but that's the only piece of

22 information that we get from the FAFSA in trying to gauge

23 financial need, financial aid, and in this case, as

24 Mr. Kahlenberg is putting forth, trying to gauge SES.

25 Q.   Dr. Long, we've heard your testimony that based upon the

1 literature, the study of race-neutral alternatives, and the

2 experience of institutions that have implemented those, no one

3 has found a successful race-neutral alternative.

4   Do you think that will always be the case?

5 A. I am unsure if that's always going to be the case, but the

6 most important thing is to pay attention to the evidence. So

7 evidence tells us not only what works, but it tells us what

8 doesn't work. So if we're wedded to that goal -- the goal of

9 making sure we have racially diverse universities, the also

10 very important but separate goal of trying to support

11 low-income students -- and the evidence is telling us our

12 current approaches aren't working, then we need to shift our

13 attention and look for other possibilities, other policies.

14 This is also why it's important to understand why the current

15 race-neutral approaches aren't working. So as we shift our

16 attention, as we come up with new ideas, we know -- we are

17 learning particular lessons from the past.

18   You know, this has been an important part of even my own

19 work. Again, I started studying financial aid because

20 affordability is so important for low-income students, but

21 money wasn't enough. So then I shifted to really focus on

22 academic preparation. Academic preparation and supports

23 weren't enough, which is why I then shifted to focus on the

24 role of information and other policies and supports. It is

25 staying wedded to that goal, but always letting the evidence

1 direct you so that you're finding things that actually work for

2 students when –– rather than hoping and promising and crossing

3 our fingers when the lessons of the last 20-plus years suggests

4 otherwise.

5   **MS. FLATH:** Your Honor, no further questions at this

6 time.

7   **THE COURT:** Yes.

8   **MR. STRAWBRIDGE:** I just need a second to set up, Your

9 Honor.

10   **THE COURT:** That's fine.

11   (Pause in the proceedings.)

12   **CROSS–EXAMINATION**

13 **BY MR. STRAWBRIDGE:**

14 Q. Good morning, Professor Long. Can you see me?

15 A. I can see you just fine. Thank you.

16 Q. Yes. I know I'm kind of at an angle here, but I'm doing my

17 best. Look for the bald guy.

18   And it's okay if I address you as Professor Long?

19 A. That would be fine.

20 Q. Okay. Thank you.

21   I just want to start by talking a little about your

22 experience. You've never actually worked in an undergraduate

23 college admissions office, correct?

24 A. I have not.

25 Q. And outside of your work in this case, you have not advised

1 a college on the availability of race-neutral alternatives,

2 correct?

3 A. No, I have not.

4 Q. You are being compensated for your work here, correct?

5 A. Yes, I am.

6 Q. At a rate of $440 an hour?

7 A. I believe that is correct.

8 Q. And at least -- at least through your deposition, you had

9 billed UNC more than a hundred thousand dollars in this case,

10 correct?

11 A. I think that's right, spread over from 2016, yes.

12 Q. And I know you mentioned that Mr. Kahlenberg had reached

13 out to you and invited you to participate in a conference when

14 you were working on your first expert report, right?

15 A. That is correct.

16 Q. And you didn't understand Mr. Kahlenberg to be engaged in

17 any improper conduct in extending that invitation, correct?

18 A. No, I did not. It's just our interests, commitment to

19 trying to support low-income students overlaps.

20 Q. Right. Because your role as an expert in this case would

21 not have actually been disclosed until your first report was

22 exchanged between the parties, right?

23 A. I am unsure about that. This is the first time I've done

24 that, so I'm not exactly sure when certain things were

25 disclosed.

1 Q. Fair enough. You just don't have any reason to think that

2 Mr. Kahlenberg knew you were serving as an expert in this case

3 when he reached out to you, do you?

4 A. Again, I am sorry, but I just don't know. I know that he

5 respected my expertise enough to ask me to join the working

6 group with him.

7 Q. He didn't mention anything about knowing you were an expert

8 in this case when he reached out with that invitation, did he?

9 A. I don't believe that he did, no.

10 Q. Now, I wanted to clarify a little bit just what opinions

11 you're offering and what opinions you're not offering in this

12 case.

13 A. Okay.

14 Q. I think you testified that you were not offering any

15 opinion with respect to which race-neutral alternatives UNC

16 should consider adopting; is that right?

17 A. So I think what I precisely said is I did make

18 recommendations of what they should consider. I did not make

19 recommendations about what they should actually implement.

20 Q. Okay. You're also not offering an opinion as to the impact

21 of any potential race-neutral alternative at UNC, correct?

22 A. That is correct.

23 Q. And I believe you also testified that you are not opining

24 on the race-neutral simulations offered by Mr. Kahlenberg or

25 Dr. Hoxby in this case?

1 A. That is correct.

2 Q. You are not opining on the models upon which those

3 simulations are based?

4 A. That is correct.

5 Q. You are not offering an opinion on the university's actual

6 efforts to consider race-neutral alternatives at any point in

7 time?

8 A. That is correct.

9 Q. Nor are you offering an opinion on whether UNC is even

10 trying to achieve critical mass of certain racial groups on

11 campus?

12 A. You are correct.

13 Q. That also means that you are not offering an opinion on how

14 critical mass should be measured at UNC, correct?

15 A. You are correct.

16 Q. You are also not offering any opinion on what threshold of

17 racial diversity should inform UNC's process; is that right?

18 A. I am not offering an opinion. I just reflect what is in

19 the research literature that other universities have used.

20 Q. And you are not offering an opinion about what might

21 constitute an acceptable trade-off at UNC between academic

22 qualifications and race-neutral alternatives, right?

23 A. No, I am not offering an opinion about the level. I

24 sometimes in my report discuss trade-offs other universities or

25 researchers have identified.

1 Q. In forming your opinions, you did not speak to any member

2 of UNC's committee on race-neutral strategies; is that right?

3 A. No, I did not speak to anyone on any UNC committees.

4 Q. Indeed, when I -- when you and I attended your deposition

5 in this case, you were unaware of that committee's existence;

6 isn't that right?

7 A. That is correct. I stayed focus on giving a comprehensive

8 review of literature, of what other universities have done, and

9 what researchers have hypothesized, but I did not spend any

10 time or did not investigate what UNC was doing or chose to do.

11 Q. And nor did you review any deposition testimony in this

12 case, correct?

13 A. I'm sorry. Could you please clarify?

14 Q. Yeah. You didn't review any deposition testimony from any

15 members of UNC's admissions office in this case, did you?

16 A. No, I did not.

17 Q. And let me just sort of ask a general question because I

18 think you repeatedly offered your opinion that race-neutral

19 alternatives were failing to achieve racial diversity at the

20 universities where they have been explored.

21   Is that a fair summary of what you said?

22 A. I'm sorry. Could you please repeat that question? Someone

23 just joined on the conference line, and so it -- your question

24 was interrupted.

25 Q. That's fair. We heard it too.

1   You -- I think you testified that -- that, at least where

2 universities had employed race-neutral alternatives instead of

3 using race in their admissions process, they had been unable to

4 achieve racial diversity. Is that what you said?

5 A.   Unable to achieve --

6 Q.   Racial diversity.

7 A.   So I said many things that were very specific. For

8 example, I talked about Texas; that they did, after the

9 race-neutral approach, have a level of racial and ethnic

10 diversity that was similar to what they had before, but there

11 are a number of reasons to question or wonder how much of that

12 was due to the policy or not.

13   So I talked -- you know, I gave a general opinion over what

14 we see with the literature, but I also spoke very specifically

15 about the research studies about specific states.

16 Q.   And let me -- I just want to make sure I'm clear on what

17 your testimony is. You said, for example, in talking about

18 California, that they were unable to achieve racial diversity

19 for 20-some years.

20   Is that -- is that the general view?

21 A.   I -- yes, I summarized literature -- the research

22 literature which has found, which has been quite consensus --

23 and this also showed up in Mr. Kahlenberg's work as well --

24 that they have not been able to replicate previous levels of

25 racial or ethnic diversity.

1 Q. And that's really what I was getting at. When you say

2 that, what you're referring to is replicating the previous

3 levels of racial diversity, correct?

4 A. So I'm reflecting what's in the literature. One measure of

5 whether or not a race-neutral approach is working is looking at

6 what the university did previously when they did have

7 race-conscious admissions. So, yes, I summarized those

8 findings.

9 Q. One of your critiques --

10 A. I'm sorry?

11   **THE COURT:** What is that? What could that be?

12   **THE WITNESS:** I think one of the microphones must be

13 close to someone who is moving a number of papers.

14 Q. (By Mr. Strawbridge) It's a mystery to us in the

15 courtroom.

16 A. I just want to make sure I can hear you.

17   **MS. TORRES:** It could be our client who logged on who

18 is next. I'll try to text her to mute her microphone.

19   **THE COURT:** All right.

20   **MR. STRAWBRIDGE:** Okay.

21   **THE COURT:** Yes.

22   **MR. STRAWBRIDGE:** Thank you.

23 Q. (By Mr. Strawbridge) And thank you for your patience. I

24 really do appreciate us working through the video technology,

25 which isn't easy for anybody. So thank you very much.

1 A.   Well, I get it. I appreciate being able to appear

2 virtually, given everything going on.

3 Q.   One of your critiques of Mr. Kahlenberg is it may not be

4 feasible for the University of North Carolina to collect data

5 on family wealth; is that right?

6 A.   So my critique is very specific to when he cites that the

7 FAFSA could be a source of this information, and there are a

8 number of shortcomings or problems with that assertion.

9 Q.   All right. And you do not disagree generally with the

10 observation that African Americans and Hispanics on average

11 face a larger wealth gap in this country than whites, do you?

12 A.   No, I do not disagree with that.

13 Q.   Okay. And is it possible to put up your slide --

14   **MR. STRAWBRIDGE:** I'll give you the page number here.

15 Do you have DX507, Mike? Let's go to page -- Slide 11. This

16 is actually, I think, the -- yeah, that's the slide, the one

17 that shows the socioeconomic status plans.

18 Q.   (By Mr. Strawbridge) Do you see that, Professor Long?

19 A.   I do. I have it in front of me.

20 Q.   So I just want to make sure I understand what's reported on

21 this slide and what's not reported. You showed the percentage

22 of black households that have income of less than $35,000

23 versus those that have income of more than $35,000, correct?

24 A.   That is correct.

25 Q.   And you did the same for Hispanic households, right?

1 A. That is correct.

2 Q. This slide doesn't reflect what the number is for white

3 households, does it?

4 A. No, it does not. The pie chart that is to the right is

5 reflecting what a university would be able to see if it was

6 offering preferences based on low-income families using a

7 definition of 35,000 or less.

8 Q. Right. Since you put this slide together, is it fair to

9 assume that if you had shown a pie chart for white households,

10 the slice of pie that had income of less than $35,000 would be

11 smaller than the slices for the other groups?

12 A. I believe that is correct, and I should say -- as you note,

13 this pie chart comes from -- in the research literature, as

14 people were trying to understand why SES plans were not

15 replicating racial and ethnic diversity, some researchers

16 figured this out themselves using data. I just updated it and

17 tried to put it in a simplified manner to try to explain the

18 phenomena that we're seeing.

19 Q. Talking about the FAFSA, you do not dispute that the FAFSA

20 does have some questions that ask about wealth, correct?

21 A. It does have several questions, yes, it does.

22 Q. And that those questions, to the extent that people were to

23 answer them, include questions about an applicant's checking

24 and savings account balances?

25 A. I believe that is correct, yes.

1 Q. As well as any real estate investments, other than the

2 family home?

3 A. I believe it does have a question on that as well, yes.

4 Q. Including a question about business assets that the family

5 might have, correct?

6 A. You're getting into farther detail, but I recall, yes,

7 that's the question that's on the FAFSA.

8 Q. And it also asks those same questions about the applicant's

9 parents, correct?

10 A. So it depends on whether or not the student is declared

11 independent or not. But for a dependent student, meaning, you

12 know, your typical student living at home, financially

13 dependent on their parents, yes, it would ask those questions

14 of the parents.

15 Q. And at your deposition in this case, you could not actually

16 say what the percentage of completion of a FAFSA was for

17 students who applied to UNC, correct?

18 A. That is correct. My work has looked nationally, although

19 some of my work has covered North Carolina. I make note of the

20 fact that this is a persistent problem across the United States

21 that many people have highlighted, but I did not have the

22 specific number for UNC.

23 Q. Could you have looked that up on a federal website?

24 A. I believe I could, or at least that's what -- the forward

25 movement with the United States Department of Education I

1   believe is -- we've been trying to get more of that information

2   out so that states, institutions, high schools can more

3   proactively try to get their FAFSA submission numbers up. But

4   I did not look it up in this case, again, staying focused on

5   what lesson could we take from race-neutral approaches just

6   generally speaking.

7   Q. You also didn't ask UNC's admissions office for that

8   information, did you?

9   A. No, I did not.

10 Q. The College Board's CSS Profile, you're familiar with that

11 form?

12 A. I am.

13 Q. That also contains some questions about wealth?

14 A. Yes. The CSS form has actually more questions about

15 wealth, trying to get at this issue in particular because the

16 FAFSA gives us so little information.

17 Q. Right. So the CSS, unlike the FAFSA, for example, does

18 actually ask information about the primary residence for the

19 applicant for its reference, correct?

20 A. So yes. As I said before, you know, I was responding to

21 the assertion by Mr. Kahlenberg about the FAFSA, which is

22 incorrect in certain ways. This CSS Profile does have more

23 information, including it does ask about home value. It still

24 has some of the shortcomings that we see with the FAFSA that I

25 noted earlier in terms of it being limited information, only

1   one year, not giving us a very strong measure of wealth, but it

2   is better than the FAFSA.

3   Q. And UNC is among the schools that has its applicants fill

4   out the CSS Profile, correct?

5   A. I believe that they are, although I don't know the

6   specifics of how they implement it and how many students

7   actually complete it. I mean, we already have concerns -- just

8   generally speaking, in the literature we see this -- of

9   students filling out the FAFSA; and you often hear,

10 particularly from the low-income students, the concern about

11 having to fill out yet another form; that this is a way we lose

12 low-income students in terms of going to college, because every

13 form is a barrier.

14 Q. Yes. And I assume, given the scope of your review in this

15 case, you can't identify any documents produced by UNC in this

16 case concerning the level of information that it has available

17 to it regarding student wealth?

18 A. Again, that was outside of the scope of what I did for this

19 case.

20 Q. Okay. You are aware, Professor Long, that Mr. Kahlenberg

21 did identify a study describing the use of richer socioeconomic

22 data by UCLA law school, which included wealth as part of its

23 race-neutral admissions process?

24 A. I am aware of that, yes.

25 Q. But in your deposition in this case, you testified that you

 1 could not remember reviewing that study as part of your work?

 2 A. I do remember awareness about it. I think what I said,

 3 because this is certainly the case, I discounted studies that

 4 were about graduate schools to really focus on undergraduate

 5 institutions.

 6 Q. Do you know whether you cited this study regarding UCLA law

 7 school in any of your reports?

 8 A. I sorry, but I can't recall. The reports were pretty

 9 comprehensive and very long, so I don't recall if I did or not.

10 Q. Do you disagree that UCLA, although it is a graduate

11 school -- and I'll grant you that. Do you agree that it is a

12 selective law school?

13 A. I am not an expert on law schools. I have a general sense

14 that it probably is. I would say that my decision to discount

15 graduate schools, though, is probably informed by the fact that

16 I do know graduate admissions quite intimately. I've sat on

17 graduate admissions committees, and it is very different from

18 what we read about in terms of undergraduate admissions.

19 Q. Have you ever sat on a law school admissions committee?

20 A. I have not.

21 Q. Do you know, for example, that most law schools do not

22 require interviews with a graduate admissions committee to

23 obtain admission to a law school?

24 A. I really have no idea. It's certainly outside of the scope

25 of the reports that I produced, and it is not a part of my

1 usual research.

2 Q. You are also aware that the College Board does provide

3 information to colleges on socioeconomic indicators, such as

4 neighborhood and school socioeconomic status?

5 A. I am aware of that push, yes. I think it's in part of

6 efforts to try to identify low-income students who might

7 qualify for highly selective institutions.

8 Q. And you're aware, for example, that it has historically

9 provided such data in the form of neighborhood cluster

10 information?

11 A. I'm not familiar with the specifics, but I do think that

12 the data that they are presenting is in that direction.

13 Q. Yes. And are you familiar with the project that's

14 sometimes been referred to as the adversity index and now I

15 think is referred to as Landscape?

16 A. I am aware of it and some of the debates and critiques that

17 surrounded it.

18 Q. And, generally speaking, just as far as you're aware, that

19 would include information to provide to colleges about

20 applicants' socioeconomic conditions, correct?

21 A. I apologize, but I would need to look much more closely at

22 exactly what measures they're using, what the source of data

23 are. Again, the details matter. And particularly as you're

24 looking across geographical areas, one thing I've noticed in my

25 own work, you know, one-size-fits-all measures are very, very

1 hard to come across that actually capture the life

2 circumstances of a particular student. So I would have to look

3 at the details very closely.

4   And, again, when they created that index, I'm aware that

5 there were a number of critiques in the literature, and I would

6 definitely want to consult them before stating any opinion

7 on -- on the College Board measures.

8 Q. Do you know whether UNC was among the schools that was

9 using that information from the College Board?

10 A. I'm -- I don't know.

11 Q. I want to turn to your Slide 17.

12 A. Okay. I have it.

13 Q. I'm sorry. Let's make it -- I believe that's the page I

14 wanted. This is the one with the color-coded grid.

15 A. Okay. Slide 16.

16 Q. I apologize. It's page 17, Slide 16, yes.

17 A. Okay. I have it.

18 Q. I want to talk just a little about what's displayed on this

19 chart. This is a summary of the institutions, some of which

20 Mr. Kahlenberg identified as having imposed race-neutral

21 alternatives, correct?

22 A. So, no, this is a summary of institutions that

23 Mr. Kahlenberg suggests they did implement race-neutral

24 approaches, and then it has in the right column his conclusion

25 of whether or not he deems them to have been successful.

1 Q. And, again, I think we talked about this, but I want to

2 make sure we're all clear on it. By successful, was that

3 specifically referring to success in replicating the level of

4 representation for specific ethnic groups versus before the

5 race-neutral alternative was implemented?

6 A. I'm sorry, but I don't recall Mr. Kahlenberg's precise

7 language in that chapter in particular that he published with

8 Potter, and that's also why on the slide I put successful in

9 quotation marks, because this is Mr. Kahlenberg's judgment. My

10 takeaways were if I accept his conclusions and I look at the

11 institutions that he did not find to be successful, they have

12 something in common with UNC-Chapel Hill.

13 Q. Okay.

14   **MR. STRAWBRIDGE:** Can we pull up PX317? Let's just go

15 to the cover page first.

16   **THE WITNESS:** I'm sorry. Is there something that I

17 should be --

18 Q. (By Mr. Strawbridge) Yes. I'm sorry. I don't know if you

19 were provided a copy of PX317. Maybe electronically you were.

20 This is *The Future of Affirmative Action: New Paths to Higher*

21 *Education Diversity after Fisher versus University of Texas.*

22   You may have accidentally muted yourselves, Professor Long.

23 We can't hear you anymore. No, I'm sorry, we still cannot hear

24 you.

25 A. Testing.

1 Q. Yep. There we go.

2 A. I apologize for that.

3 Q. No problem.

4 A. So are you asking me to look at the article by Richard

5 Sander?

6 Q. No. I'm sorry. I was asking you about *The Future of*

7 *Affirmative Action: New Paths to Higher Education Diversity*

8 *after Fisher versus University of Texas.*

9 A. I'm sorry. One moment. I'm going to play around with my

10 volume. I'm still having some problems here.

11   Okay. Testing. Can you hear me okay?

12   **MS. FLATH:** We can hear you.

13   **THE WITNESS:** I'm sorry. I have a Jabra speaker that

14 for some reason went out. You can hear me okay?

15   **MS. FLATH:** Yes, thank you.

16 Q. (By Mr. Strawbridge) We can hear you.

17 A. I'm just having trouble hearing you.

18   Okay. All right. So I'm sorry. I want to make sure I

19 have the same -- the right exhibit. So which exhibit?

20 Q. It's 317.

21   **MS. FLATH:** 318.

22   **MR. STRAWBRIDGE:** It may be mislabeled in the title,

23 but it's actually 317.

24   All right. We appear to have our wires crossed here, and

25 I'm going to apologize to the Court and to Professor Long about

1 it. Why don't we just set this aside, and we'll try to do the

2 questioning without the article.

3   **THE COURT:** All right.

4   **THE WITNESS:** Okay. So what do you need me to do?

5 Q. (By Mr. Strawbridge) Let me just try to re-orient us, and

6 let me see if we can do it without having to look at papers.

7   Now, on the chart that we were just looking at on DX507 --

8 A. So I should be -- I'm sorry. Could you repeat the PX --

9 Q. I'm sorry. We're going to back to your chart as to

10 institutions that are successful versus unsuccessful.

11 A. Okay.

12 Q. All right.

13 A. Slide 16?

14 Q. Yes, correct.

15 A. Okay.

16 Q. This chart does not show the University of Texas, correct?

17 A. The University of Texas is not listed, no.

18 Q. Right. And the University of Texas was one of the

19 institutions Mr. Kahlenberg discussed, correct?

20 A. Yes. And as I testified earlier and in my other report,

21 this is the concern about the details matter and how

22 researchers have concluded that Texas has not been successful.

23 But if you don't pay attention to the context of what was

24 happening in the state, you could come to a conclusion that may

25 not be correct.

1 Q. So I want to talk to you about your conclusions with

2 respect to the University of Texas.

3   First of all --

4 A. Okay.

5 Q. -- you would agree with me that the acceptance rate at the

6 University of Texas is closer to the bottom of the chart than

7 the institutions listed at the top of this chart?

8 A. I would need to consult my reports to pull the exact

9 number. I don't have that memorized. But I do know, for

10 example, UT-Austin to be a selective public university.

11 Q. Would you agree that it's generally comparable to UNC in

12 terms of the acceptance rate of admission of applications?

13 A. I would have to look at the specific numbers to agree or

14 disagree. I can't say.

15 Q. You're aware that Mr. Kahlenberg identified one study that

16 found that despite their lower test scores, top 10 percent

17 black and Hispanic students consistently performed as well or

18 as better than the white students they displaced once Texas

19 instituted its top 10 plan?

20 A. I believe that was the Niu and Tienda study. So this was

21 more about not the success or, you know, whether or not a

22 race-neutral approach could replicate a level of diversity. It

23 was more about the longer-term outcomes of students, yes.

24 Q. But do you disagree that that paper contained the finding I

25 just read to you?

1 A. So if I remember correctly, that paper uses a regression

2 discontinuity design. So the paper is very nicely done. It's

3 comparing students who are in the top 10 percent, say the 90th,

4 91st percentile, to students who are just below the cutoff, so

5 the 88th or 89th. What this discontinuity study is doing is

6 really focusing close onto that cutoff, and it can say

7 something about what's happening there.

8   So, yes, I think that is a very fine study, but we have to

9 be careful in terms of interpretation because that study says

10 nothing about a student at the 95th percentile, the 85th

11 percentile. It doesn't say anything about the overall affects

12 for the entire student body or community because regression

13 discontinuity studies are just focused, again, on students just

14 above or just below the cutoff. So it gives us some

15 information, but it doesn't give us all the evidence we need to

16 then walk away and say we know what would happen with the full

17 student body.

18 Q. I just want to break that down a little bit.

19 A. Okay.

20 Q. Do you have a copy of PX319?

21 A. I'm sorry. I can barely hear.

22 Q. Do you have a copy of PX319?

23 A. Yes, I do.

24 Q. That's the paper titled "Minority Student Academic

25 Performance under the Uniform Admission Law."

1 A. Yes.

2 Q. All right. And can -- I'm going to direct you to page 54.

3 A. Okay. I'm on page 54.

4 Q. All right. And you see the paragraph beginning "Despite

5 their lower average test scores..."? It's on the right column.

6 A. Yes, I do.

7 Q. Okay. And I'll try not to repeat this into the record, but

8 can you just agree with me that that indicates that, despite

9 their lower average test scores, top 10 percent black and

10 Hispanic students consistently performed as well or better than

11 white students ranked at or below the third decile throughout

12 the entire observation period?

13 A. Yes, that is their finding.

14 Q. Okay. And you said that you think that this paper -- you

15 have to be careful about drawing any conclusions because it

16 employs a regression discontinuity?

17 A. So I'm just checking if this is the paper. They do a

18 couple of papers. If you'll give me just one moment.

19 Q. Please.

20 A. So I think it was their other paper that was the regression

21 discontinuity. I'm trying to recall exactly what method they

22 used.

23   What I did say generally is it's not a matter of you can

24 take a conclusion away from this or not. It's the details that

25 matter, that give us some sense of what does this piece of

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1 research tell us about the big-picture questions that we have;

2 and so this is looking specifically at the question of minority

3 student academic performance, which gives us some insight into

4 a particular slice of what happened at one institution in

5 Texas.

6   Again, it's not jumping out at me exactly what methods they

7 are using for me to say, okay, what are the takeaways, but I

8 know these to be careful researchers in general, and it is a

9 study that's published in a peer-reviewed journal article,

10 which means it has gone through a referee process.

11 Q.   Thank you.

12   I believe you also criticized Texas and other top

13 percentage plans because they rely upon segregation; is that

14 right?

15 A.   I think criticize is a strong word. I made the

16 observation, as many, many have in the research literature,

17 that for that proxy to work, a percentage plan or anything

18 place-based, you need to have a high level of segregation.

19 This is something that comes up in the literature -- research

20 literature again and again and again.

21 Q.   And when you referred to segregation, such as on your slide

22 show earlier, you mean the historical effects of segregation,

23 not some present law requiring segregation, correct?

24 A.   So just saying it exists. So percentage plans are using

25 some other measure that's trying to account for race without

1 actually being race, and for place, it means segregation. I'm

2 not making a comment on how that segregation came to be.

3 Q. Do you think percentage plans can also attempt to achieve

4 other types of diversity, as well as racial diversity?

5 A. I think that's what we found in the research literature,

6 that some of what happened in Texas is it drew more students

7 from rural areas. They tended to be white students. And that

8 is a perhaps important goal that Texas met. I can't comment.

9 But I can say it's a separate goal that they may have enjoyed

10 or -- you know, I guess I can't comment on that. But, yes,

11 Texas did see other effects, other changes in the composition

12 of the student body.

13 Q. To the extent that top 10 percent plans do help achieve

14 racial diversity at levels comparable to what race-conscious

15 plans do, do you think it's a problem that those plans might

16 provide opportunities to those that live in communities that

17 are still feeling the effects of historical segregation?

18 A. I think that's beyond the scope of what I was asked to do.

19 What I was asked to do, again, was to look at the research

20 literature and to sketch out any of the lessons that were

21 learned, the direct effects, the indirect effects. It's not up

22 to me to judge whether or not it's good, bad, deficient, you

23 know, for a particular institution.

24 Q. I think you also contended that the results at Texas should

25 be reviewed carefully because of underlying demographic changes

1 in the state; is that right?

2 A. Yes, I said the context should be taken into account.

3 Q. Does that mean that the demographics of Texas are different

4 from the demographics of other states, so we can't draw any

5 conclusions from what happened in Texas?

6 A. No, that is not the point that I made at all.

7 Q. Okay. What is the point that you made? I didn't mean to

8 put words into your mouth.

9 A. Sure. No. Again, this goes to the issue of policy and

10 studying policy. We aren't in laboratories where we get to

11 change one thing and nothing else changes in the world. We, as

12 social scientists, economists, others, have to spend a great

13 deal of time trying to isolate the impact of the policy from

14 other things that keep changing in the world.

15   Let me give you an example. You know, if I were studying a

16 policy that went into effect during 2020 and in a couple of

17 years got data to try to understand the impact of that policy,

18 well, a big question would be are the effects I'm seeing due to

19 a policy or is due to everything else that has changed during

20 2020.

21   So for Texas, when they implemented the percentage plan,

22 they did it during a time when other things were changing in

23 the state. And so the point that I'm bringing up is how do you

24 separate out what is the effect of a policy versus what is the

25 effect of the underlying population change. And so this is

1 what multiple researchers have brought up, and the fact that

2 the underlying population changed at the same time calls into

3 question whether or not the results we see at Texas -- in Texas

4 are due to the policy or are due to other things.

5   And, in fact, some researchers have noted if more students

6 of color are in Texas, we might expect to actually see the

7 university have more students of color if we think the policy

8 is different. So that's the question it raises. It's trying

9 to separate out what's due to the policy versus what's due to

10 all the other things that are changing in the world at the same

11 time.

12 Q. And isn't it true that -- at least at your deposition, in

13 describing this concern about the changing and the demographics

14 of Texas, that you don't know whether it's true or how much of

15 that change was due to demographics as opposed to the top 10

16 plan?

17 A. Yes, I did say that at my deposition, and I've just said

18 that now. I said we don't know how much weight to assign to

19 the policy versus the demographic changes. Directionally it

20 seems to make sense, but we don't have the evidence, and we're

21 just not able to separate out. So this is what makes it very

22 hard to walk away with the conclusion that the race-neutral

23 alternative, the percentage plan, was successful, because we

24 still have question marks.

25 Q. Okay. Going back to the slide from your presentation

1 regarding the chart of the various universities that

2 Mr. Kahlenberg discusses --

3 A. So, again, Slide 16; is that correct?

4 Q. Yes, in DX507.

5   I understand your testimony to be that the results from

6 Arizona, Nebraska, Georgia, Florida, and Washington are less

7 relevant as to selective universities like UNC. Is that fair?

8 A. I said the relevance is questionable. So what I suggested

9 to UNC is, yes, you should explore the possibility of things

10 like percentage plans, SES-based plans; but as you look at the

11 research literature about who has been successful versus not,

12 there's a clear pattern where more selective universities who

13 are more similar to you have not been successful. So this is

14 me giving you full information, yes, go consider it, but this

15 is what we've found in terms of the evidence.

16 Q. I understood your testimony to acknowledge that perhaps

17 since the 2012 study, more recent numbers from the University

18 of California indicate that it is being more successful with

19 respect to replicating the racial diversity, correct?

20 A. No, we -- I acknowledge the observation that it seems that

21 their student body is more diverse. What I can't possibly

22 extrapolate from is what is responsible for that. I find it

23 difficult to take the leap that a policy that started 20 years

24 prior is responsible for the current, you know, makeup of the

25 student body, especially given all the changes that have gone

1 on in California. So we note the results. I am not positive

2 and I don't have research and, in fact, there are reasons to

3 wonder 20 years later is that policy what's responsible for

4 that.

5 Q. Do you have any research in mind in which you think that,

6 despite the laws of California, those universities are actually

7 using race in their admissions process?

8 A. I do not know the current status of what California is or

9 is not using in their admissions processes.

10 Q. Would you agree that there are demographic differences in

11 all states in which these universities are located from one

12 another?

13 A. Generally speaking, yes, states vary tremendously in the

14 racial and ethnic makeup.

15 Q. And so, for example, the demographics of the state of

16 Michigan where in-state applicants to the University of

17 Michigan are going to be clustered, would that be different

18 from those at the University of North Carolina?

19 A. I would have to check. I know, you know, the distribution

20 of families of different races in Michigan, you know, very much

21 being concentrated in certain ways, Detroit and so on, versus

22 North Carolina; I'm not sure how similar or dissimilar they

23 are.

24 Q. That information is available through the census; is that

25 correct?

1 A. Yes, it is.

2 Q. And I think you relied on a number of census data in your

3 own reports in this case?

4 A. I don't know that I relied on a number. And, again, in

5 producing the SES, I looked at one table to make those simple

6 pie charts. But, again, since my -- the scope of my work was

7 really focused on research evidence, what people have written,

8 what institutions had actually done. That was where the bulk

9 of my focus was on. For this table, as I was responding to

10 Mr. Kahlenberg's assertions, I did look up selectivity rates to

11 give myself some sense of how similar or dissimilar and what

12 were kind of patterns that we see in terms of the impacts.

13 Q. Okay.

14   **MR. STRAWBRIDGE:** Can we pull up PX322?

15   **THE WITNESS:** PX322.

16 Q. (By Mr. Strawbridge) That's a demonstrative slide that we

17 sent over and provided it to your attorney.

18 A. Yes, I have it. Thank you.

19 Q. A comparison of the racial composition of a number of

20 states; do you see that?

21 A. Yes, I do see that.

22 Q. Okay. And so assuming that this information is accurate

23 from the census data, going back to my earlier question, you'd

24 agree with me that there's a significant difference in, for

25 example, the African American representation in the state of

1   North Carolina versus the state of Michigan? Would you agree?

2   A. Yes, that's shown on the slide. I assume this is correct.

3   There is a difference.

4   Q. The same with California? In fact, there's an even greater

5   African American population in North Carolina compared to

6   California, correct?

7   A. That is correct.

8   Q. The numbers with North Carolina are much closer when we

9   look at Florida and Georgia, at least with respect to African

10 Americans?

11 A. Certainly, you know, it -- it's closer, yes.

12 Q. And this is some of the data, the context, that you think

13 is important to think about when we're assessing the success of

14 race-neutral alternatives in different states, correct?

15 A. No. So when we are assessing the impact of a race-neutral

16 approach, we're not comparing what Georgia was able to achieve

17 versus the level that Michigan was able to achieve. The way

18 that researchers have looked at this is they have looked at

19 what were the conditions, what was the composition of the

20 student body when that institution used race-conscious

21 admissions in comparison to when they did not and they used

22 some other policy.

23   So, as I discussed with Texas, it's Texas comparing

24 pre-policy change to post-policy change with these other

25 states; and what you see, even in the Kahlenberg and Potter, if

1 you look at the back of that chapter, is they are comparing

2 Florida before they made a policy change to after a policy

3 change. It isn't about making comparison across the states.

4 It's about within a state, when they stop using race-conscious

5 admissions and go to some other alternative policy, what

6 happens. So it's Georgia versus Georgia, not Georgia versus

7 Michigan.

8   Now, if they have underlying differences in the composition

9 of their state, we might expect that their student bodies at

10 baseline are going to be different, but that's a -- that's

11 something completely different.

12 Q. So you don't think, for example, in determining what's

13 successful in North Carolina, we should take into account the

14 experiences in other states and how those states' demographics

15 might differ from North Carolina's?

16 A. Oh, we absolutely should take into account what the

17 experience is in other states, as I've emphasized multiple

18 times, you know, really trying to learn from the lessons of the

19 last 20 years to try to inform UNC about the factors that

20 influenced the impact of a race-neutral approach.

21   But in terms of this simple comparison that Florida has

22 this composition and North Carolina has this composition, so we

23 should just assume one size fits all because they're similar in

24 terms of their state composition, that's not at all what I am

25 saying.

1   Again, the details matter. What is the composition of the

2 state certainly matters for a particular institution. Does it

3 change over time? Again, that was the -- what I emphasized

4 with Texas. It was the fact that the population composition,

5 not that it was similar or dissimilar to North Carolina, but

6 the fact that it changed over time at the same time that the

7 policy changed.

8   So, yes, North Carolina, if it were to approach this, I

9 would say, yes, you could do the same thing Texas did and take

10 into account what else is changing in the state.

11 Q. Did you in your reports distinguish the results of what

12 happened in Texas, California, Florida, and Colorado, in part

13 because they differ substantially from North Carolina in terms

14 of state demographics?

15 A. No. So I talk about the Texas experience and what can be

16 taken away with the percentage plan. Colorado, when I'm

17 discussing that, it's the Gaertner research, which

18 (indiscernible).

19   (Court reporter requests clarification.)

20 Q. I'm sorry. Professor Long, I'm sorry. The court reporter

21 was just having a hard time keeping up. Where --

22 A. I'm so sorry. I apologize. I will try to remember to go

23 slower. Please do stop me if the court reporter is having

24 trouble.

25 Q. And let me state for the record that problem is my problem,

1 maybe your problem. It's not the court reporter's fault.

2 A. We will try to help out.

3 Q. Okay. Did you want to finish your answer?

4 A. So yes. Again, you -- I believe the question that you

5 asked me was about the comparisons across states and whether or

6 not the composition of the states mattered. What I presented

7 to the university based on the research is we do have these

8 different experiments with race-neutral approaches, and we see

9 different outcomes by state, and one of the factors has to do

10 with the underlying population and how it's changing. Now,

11 this is something UNC should consider.

12   In particular, if you were considering a place-based

13 approach, it will matter greatly what in North Carolina there

14 is in terms of segregation, you know, how much is that

15 place-based proxy correlated with race in North Carolina. I

16 cannot comment on the degree to which it is the case in

17 North Carolina, did not look specifically at the state, but

18 presented the evidence of how other universities have grappled

19 with this and, big picture, what are some of the differences we

20 see across universities.

21 Q. One more line of questioning on this topic, Dr. Long -- or

22 Professor Long. I'm sorry.

23   You didn't ask anybody at the University of North Carolina

24 which universities they considered to be comparable to them,

25 correct?

1 A. No, I did not.

2 Q. Okay. And you didn't specifically ask them which

3 universities they may have used internally for comparables of

4 measuring how they were doing on racial diversity, did you?

5 A. No, I did not. And to be honest, I did not speak with

6 anyone at UNC beyond an initial meeting in, I think, 2015, when

7 I was first just becoming familiar with this.

8 Q. So you would not know, for example, if UNC had previously

9 viewed Arizona, Washington, Colorado, Texas, and Texas A&M to

10 be comparable universities for their own purposes?

11 A. I do not know. Again, I just presented the

12 comprehensive -- my comprehensive survey of the research

13 literature for them to then pick and choose whatever was

14 relevant.

15 Q. Thank you, Professor Long. I appreciate your time.

16   **MR. STRAWBRIDGE:** I do not have any other questions.

17   **THE COURT:** Thank you.

18   Anything further?

19   **MS. FLATH:** Nothing further, Your Honor.

20   **THE COURT:** All right. Anything?

21   **MS. TORRES:** No. Thank you.

22   **THE COURT:** Thank you so much, Professor Long. We

23 appreciate your assistance with this.

24   **THE WITNESS:** Thank you. It was an honor to be here.

25   **THE COURT:** You are relieved at this time.

1   **THE WITNESS:** Thank you very much.

2   **MS. TORRES:** So at this point in time, I believe the

3   Defendant Intervenor witnesses are on the schedule next.

4   **MR. FITZGERALD:** Yes, Your Honor. UNC has no more

5   witnesses. We rest our case, and it moves to the Intervenors.

6   **THE COURT:** All right.

7   **MS. TORRES:** And we will call our next witness. We

8   had four witnesses scheduled. We actually just had one drop

9   off, and so, given the timing, we're anticipating three. They

10 are live witnesses, and so we are hoping to have them all heard

11 today, and we wanted to just ask the Court whether or not it

12 would be possible to go over 20 minutes, if necessary. I know

13 there's a planned cross for one of the witnesses as well. So

14 we wanted to raise that to the Court's attention.

15   **THE COURT:** We will work with you.

16   **MS. TORRES:** Okay. Thank you. And we're going to

17 transition tables, so if the Court would like to take a

18 five-minute break now or ten.

19   **THE COURT:** Maybe we'll go ahead and take our

20 afternoon break, and we will resume at five after 3:00.

21   (An afternoon recess was taken from 2:50 p.m. until

22 3:05 p.m.; all parties present.)

23   **THE COURT:** Yes, ma'am, if you would call your next

24 witness, please.

25   **MS. TORRES:** Thank you. The Defendant Intervenor

1 calls Andrew Brennen on the stand.

2 **ANDREW BRENNEN, INTERVENORS' WITNESS, SWORN**

3 **DIRECT EXAMINATION**

4 **BY MS. TORRES:**

5 Q. Good afternoon, Mr. Brennen.

6 A. Good afternoon.

7 Q. Can you share with the Court how are you connected to this

8 case?

9 A. I am a 2019 graduate of the University of North Carolina

10 and have been involved in this case since my sophomore year.

11 Q. And what did you study while at UNC?

12 A. At UNC I studied political science -- well, ultimately

13 landed on political science.

14 Q. And can you describe your involvement in any activities

15 while at UNC?

16 A. Yeah. My first two years at UNC I participated in student

17 government. I was drawn to student government after reading

18 about the legacy of student self-governance at UNC, and it was

19 something I was involved in at high school.

20   The second two years at UNC I participated -- I was a

21 member of the Board of Directors for *The Daily Tar Heel,* which

22 is the independent student newspaper at UNC, and I was chair of

23 the governance committee.

24 Q. And what have you pursued professionally since graduating

25 from UNC?

1 A. Since graduating, I have pursued a career in communications

2 and education policy. I'm currently an education Fellow at

3 National Geographic.

4 Q. And you said that you've been involved in the case since

5 your time at UNC. Why did you choose to get involved in this

6 case?

7 A. When I first became involved in this case, it was my

8 understanding that it was about the importance of racial

9 diversity on campus generally and, in particular, increasing

10 racial diversity on campus. For me, learning in a racially

11 diverse environment was important, and so the opportunity to

12 not only protect that environment but to potentially increase

13 the amount of diversity was appealing to me.

14 Q. Thank you, Mr. Brennen.

15   And do you identify with a particular race or ethnicity?

16 A. Yes. I identify as African American.

17 Q. And does that identity intersect with any other salient

18 identity?

19 A. Yes. I am also queer and a member of the LGBTQ community,

20 and I would say that my family comes from relative affluence.

21 Q. And prior to attending UNC, where did you grow up?

22 A. I moved around a lot, but spent most of my childhood in

23 Lexington, Kentucky.

24 Q. And can you describe the racial demographics of the

25 neighborhoods where you grew up?

1 A. In most of the neighborhoods where I grew up, we were one

2 of few black families. They were mostly white neighborhoods,

3 and, as a result, my schools were also mostly white.

4 Q. Did your racial identity impact your experiences growing

5 up?

6 A. It did in a number of ways. You know, first of all, my

7 mother has a collection of black Santa Clauses, which many of

8 my white friends were confused by but seemed normal to us.

9   Also, you know, there was always the conversation:

10 Expectations that my parents had for my brothers and I in terms

11 of how we interact with the police, how we interact with the

12 society knowing that our skin color was different. You know,

13 when I'm running down the sidewalk in our mostly white

14 neighborhoods, you know, I have to be aware of the fact that I

15 might be seen as someone that does not belong; and when faced

16 in those situations, we smile, we deescalate, and we try to

17 move on.

18 Q. And how did those racialized experiences impact your

19 perspective prior to college?

20 A. Well, I think in a couple of different ways. You know,

21 first of all, there were certain expectations I think that

22 people had of me because of the color of my skin; and I think I

23 often found myself trying to buck those expectations, trying to

24 be something or do something that people did not expect from

25 someone who was -- who was black.

1   I mean, my -- my classmates would ask me questions like,

2 "Well, you know, why are you acting like an Oreo or acting

3 white?" the implication being that because I was quick to raise

4 my hand to answer questions or grasp material, that that was

5 somehow acting white.

6   So, you know, I would say every experience that I had prior

7 to college was informed by the color of my skin, and so my

8 perspective going into college was similarly so.

9 Q.   And you stated earlier that you identify as someone coming

10 from relative affluence. Can you describe the socioeconomic

11 background of your family?

12 A.   Yeah. My mom was the oldest of three daughters who grew up

13 raised by her mother. She worked her way through college and

14 then law school. My dad grew up in the country, north Florida.

15 He was the first in his family ever to go to college, the first

16 ever to go to law school, the first African American dean of

17 Kentucky law school, and when he ended was the ninth longest

18 serving dean in the country.

19   And so for me, watching their careers and their brilliance

20 play out, moving from being kind of relatively low income --

21 poor -- they were poor -- to where they are now, that was -- I

22 mean, they are my biggest inspiration. But also I'm aware that

23 their success means that my brothers and I have had a childhood

24 very different from most of my families and, you know, has

25 afforded certain privileges that my parents have insisted that

1 my brothers and I be hyperaware of.

2 Q. Thank you.

3   And can you provide any examples of how your racial

4 identity has shaped your perspective in ways that are similar

5 or different from your socioeconomic setting?

6 A. Well, I actually -- I actually don't see much of a link

7 between the two. You know, like I mentioned earlier, if I'm

8 running down the neighborhood and, you know, I don't have my

9 cell phone on, whatever, people don't see me as someone that is

10 relatively affluent; they see me as a black man. And so all of

11 the implications that go into those interactions are completely

12 irrelevant to my socioeconomic status. I don't really think

13 that -- socioeconomic status in race in terms of how I interact

14 with the world and perceive the world, they certainly have

15 impact, but I don't think they're very connected.

16 Q. Thank you.

17   Turning to your application to UNC, when did you apply to

18 UNC?

19 A. I applied to UNC in the fall of 2013.

20 Q. And did you choose to share about your racial identity as

21 part of your application?

22 A. I did.

23 Q. In what ways?

24 A. I indicated my racial ethnicity when asked on the

25 application. I also wrote about my perspective as an African

1 American student as part of the essay.

2 Q. And when you say that you identified it when asked, are you

3 referring to the demographic check box in --

4 A. Yes.

5 Q. Thank you.

6 　　　　　**MS. TORRES:** Your Honor, the next few questions

7 discuss a sealed exhibit. I promise to notify you when we're

8 done discussing it, but if we could turn the feeds off.

9 　　　　(Audio privacy settings were turned on.)

10 　　　　(Sealed portion of trial testimony occurred next and

11 appears under separate covered filed with the court.)

12 　　　　(Audio privacy settings were turned off.)

13 Q. (Ms. Torres) And you discussed the application process.

14 A. Uh-huh.

15 Q. When -- when you're discussing it, do you have opinions

16 beyond your personal experience?

17 A. Within the process?

18 Q. Within the process.

19 A. Yeah, I -- so, first of all, on my personal experience as

20 an applicant, you know, I -- I thought it was important that

21 race be used, and I do think that UNC should kind of continue

22 it in a similar way. However, I will say that I have not

23 studied the mechanics of UNC's admissions process, and so I

24 wouldn't want to speak to their -- like specifics of how they

25 use race other than from my experience as an applicant.

1 Q. And do you recall when you were accepted to UNC?

2 A. I was accepted in the fall of 2014.

3 Q. And what other colleges offered you acceptance for

4 enrollment?

5 A. I was accepted to Yale University, the University of

6 Pennsylvania, Wake Forest University, Davidson College,

7 Vanderbilt University, University of Kentucky. I think that's

8 it.

9 Q. And what convinced you to accept the offer to UNC?

10 A. UNC offered a lucrative scholarship opportunity that was

11 very appealing. I also was drawn to, like I mentioned earlier,

12 UNC's history of student self-governance and, you know, I think

13 that -- and I also kind of was attracted to a lot of the kind

14 of student activism that was kind of being led by black

15 students on campus.

16 Q. And was racial diversity important in your decision-making?

17 A. Oh, yes. It was important to me that I attend a diverse

18 school and have a diverse learning environment because I -- you

19 know, at that point I understood how valuable a diverse

20 learning environment could be.

21   When I was taking a look at UNC, I was, on the one hand,

22 heartened by some of the programs that they had where they were

23 trying to increase diversity on campus and support communities

24 of color, but I was also concerned by the fact that they had

25 very few African American men enrolled on campus and, you know,

1 I -- for me, that was a flag.

2 Q. And what ultimately convinced you to go?

3 A. You know, I think I was convinced by the fact that not only

4 were they moving in the right direction, but just the energy on

5 campus with respect to -- you know, the students were trying to

6 organize for a safer, more inclusive campus. You know, that

7 work being led by people of color, women of color specifically,

8 was very inspiring to me; and so kind of ultimately as I

9 weighed those different scholarship opportunities and different

10 whatever, going to a public school, UNC, just seemed like the

11 right fit for me.

12 Q. And while you were at UNC, did you interact with students

13 of different racial backgrounds?

14 A. Yeah, almost immediately after coming to UNC, I was kind of

15 surrounded by different opportunities to interact with folks.

16 You know, when I was first coming to campus, of course there is

17 the kind of open house opportunity where everyone comes out

18 with their clubs and every -- you know, what they're doing and

19 trying to let you know about their work; and so I learned so

20 much about different cultures that were on campus, the

21 different religions represented on campus during those sorts of

22 activities.

23   But there were also, I think, instances that were less fun,

24 frankly. You know, while I was at UNC, three Muslim students

25 were shot and killed within their home in Chapel Hill, and that

1 was very jarring for campus. And, you know, during that time

2 many of the Muslim students were kind of doing a lot to be

3 visible and to educate folks about Islam and everything else.

4 And so, you know, during that time also I was learning about

5 how, you know, folks of different races interact differently.

6 You know, I presumed that I knew all of that because I was

7 black, but, like, I -- I just -- I learned so much from just

8 the huge amounts of diversity on campus, more than I ever

9 thought I would.

10 Q. And can you describe any examples of how racial diversity

11 in the classroom impacted the classroom discussion?

12 A. Yes. I -- so two examples come to mind -- three. The

13 first is from my English 105i class. It was a class focused

14 on -- I think it was law, and there was a topic actually on

15 affirmative action that came up as a discussion point in class.

16 I was, I think, the only -- I was the only African American

17 student in the class, and one of the white students in the

18 class made a comment along the lines of, you know, "Oh, we

19 shouldn't have affirmative action because then all of the black

20 students on campus are going to think that they don't belong

21 here."

22   And to me, it was a really offensive thing for him to say,

23 that in many circumstances I would have pushed back on.

24 However, being the only African American student in the class,

25 I did not want to kind of cause any kind of issue. I didn't

 1 | want to try and represent the perspectives of all African
 2 | Americans on campus. I did not want to get into a fight with
 3 | this kid, so I just kind of let it go. And, you know, for me,
 4 | reflecting on that experience, I wish that maybe I had spoken
 5 | up.

 6 | But, you know, later in college -- it was funny. I
 7 | actually had a somewhat similar experience in a class that was
 8 | kind of a combination of UNC and Duke students on U.S. social
 9 | movements, and, you know, this class was much more diverse and
10 | including kind of some folks that I knew from previous classes
11 | and activities. And the topic was voter suppression in the
12 | South, kind of post-voting rights for African Americans. And
13 | she -- the professor was asking us to kind of provide our
14 | opinions on, you know, given that black folks have the right to
15 | vote, why are so many not voting.

16 | And the answers that my classmates were coming up with were
17 | intelligent and, you know, smart answers, but they seemed to be
18 | missing, like, the elephant in the room, which I provided as
19 | being the fact that black communities were being terrorized at
20 | the time by the Klu Klux Klan and intimidated through violence
21 | out of not voting. And I felt like it was important to make
22 | that point so as to not whitewash that history, but I also felt
23 | more comfortable making that point because I knew that there
24 | were others in the class prepared to back me up and that I
25 | would not have to, like, single-handedly convince the white

1 students in my class that terrorism at the hands of the KKK was

2 a significant factor in low voter turnout rights in South black

3 communities.

4 Q. And when you say there were others in the class who would

5 back you up, can you describe the racial demographics of those

6 students?

7 A. Yeah, other students of color, other black students in that

8 class. And I think that specifically made me feel much more

9 comfortable engaging in a dialogue about racism, racial

10 discrimination.

11 Q. And do you recall the professor's reaction to your comment?

12 A. She didn't react much in the class, but later she reached

13 out to me and thanked me for raising that point and, you know,

14 letting me know that she was hoping someone would -- and, you

15 know, for me, that was very validating because, you know,

16 speaking up in class is a -- especially, like, these classes

17 where everyone is really smart, it's an intimidating thing. So

18 I felt very validated and just, like, I had done the right

19 thing when my professor kind of reached out to say that.

20 Q. And how would you describe the level of African American

21 students generally at UNC during your time there?

22 A. I would say -- I'm sorry. Can you repeat that question?

23 Q. How would you describe the level of black students at UNC

24 during your time there?

25 A. Yeah, I think that it would -- I think that there were not

1 enough African American students on campus, frankly. Like I

2 mentioned earlier, for black men, even worse. And so, you

3 know, I think that it's low and could be improved.

4 Q. And you described your English 105 class earlier and your

5 discomfort with speaking up. Do you think that if there were

6 an end to affirmative action programs, that would put an end to

7 the type of comments that you heard in class?

8 A. No, I think it would -- I think it would probably increase

9 the kinds of comments.

10 Q. Why?

11 A. Well, I think it would decrease the number of African

12 American students on campus, which would I think affect -- it

13 would make it less likely that someone would be confronted or

14 pushed back on who had these sorts of opinions or less likely

15 that perspectives from African Americans would be present in

16 the classroom discussion.

17 Q. And were there any other experiences on UNC's campus where

18 you felt targeted based on your race?

19 A. Yes. There is at least one occasion that I can remember

20 where -- and this is something that has happened to me many

21 times, walking down the street with a group of friends and a

22 random stranger decides to yell the N word at me. And, like I

23 said earlier, in the moment, you smile, you deescalate. It's

24 hurtful, though.

25   And I remember afterward calling my grandmother, who I

1 | always call for things like this, and then also just kind of
2 | reaching out to some of the other African American students in
3 | my program. And, you know, I think that, like, being able to
4 | seek community in that way was important for me as I'm trying
5 | to, like, maintain my sense of, like, self-confidence,
6 | self-worth, like, in the face of these verbal attacks.
7 | Q. And just to clarify for the record, when you say that this
8 | has happened many times, how frequently did that happen at UNC?
9 | A. It's happened more than once at UNC. I can't remember the
10 | exact number.
11 | Q. Thank you.
12 | Are you familiar with UNC's history of racial
13 | discrimination?
14 | A. I am somewhat familiar, yes. I -- you know, when I was a
15 | student on campus, there was a lot of controversy over, for
16 | example, renaming buildings and statues that were erected in
17 | honor of members of the KKK, other racists; and, you know, I
18 | think many students of color on campus were hyperaware that we
19 | were sleeping and attending class in buildings named after
20 | people who bragged about their racism. So I just -- you know,
21 | I think we were all pretty hyperaware. Then, of course, me, I
22 | also engaged in some bit of archival research on campus, and so
23 | I was maybe a little bit more familiar than the average person
24 | on the history of racial discrimination.
25 | Q. And when you say that black students were hyperaware of

1 this history, how do you think it impacted their participation

2 in classrooms?

3 A.   Well, I guess I'm not sure. I guess I could say how it

4 impacted my participation in class, which is that it meant

5 being aware of the context that we were in. I mean, I think --

6 I think that black students -- me, I was always -- I was always

7 careful. I was always -- did what I needed to do. I was

8 always wanting to dot the i's because, you know, I -- this

9 campus -- I just needed to -- I just needed to do what I needed

10 to do.

11 Q.   And during your time at UNC, did you see any progress made

12 in the racial climate?

13 A.   Yes. So there were many, many protests and rallies and

14 efforts by students to try and take down the statues, rename

15 the buildings; and many of them were successful while I was a

16 student there.

17   There were also efforts by members of the administration,

18 like Vice Chancellor Crisp and Chris Faison, to try and create

19 a more supportive and inclusive environment for African

20 Americans on campus. So there were certainly examples of

21 progress while I was there.

22 Q.   And can you describe the racial demographics of the

23 individuals that were leading that progress on campus?

24 A.   This is all led by black women. You know, I -- maybe it

25 had to do with the numbers, I don't know, but I -- you know,

1 all of the major, significant progress that was made with

2 respect to racial diversity, racial inclusion on campus while I

3 was a student at UNC was led by women of color.

4 Q. And I'm going to turn now to represent to you that there's

5 a discussion in this case about reducing the number of black,

6 Latino, and Native American students on campus.

7   Do you have any sense of how the reduction in black,

8 Latino, and Native American students would have impacted your

9 experience at UNC?

10 A. Well, first of all, I think it would have reduced the

11 amount of activism that we were just describing. I don't think

12 that there would have been, you know, the same level of -- of,

13 you know -- of organizing and activism by students of color to

14 try and create a more inclusive environment at UNC if we were

15 to reduce their numbers on campus.

16 Q. And I'll represent to you now if there was an increase in

17 the number of blacks, Latinx, and Native Americans students at

18 UNC, do you have a sense of how that increase would have

19 impacted your experience at UNC?

20 A. Well, I think it would have -- you know, first of all, on

21 the African American activism side, I think it would have

22 increased that. I also think it would have provided more

23 community for those students of color who were on campus. You

24 know, like I mentioned earlier, when I encountered situations

25 that made me uncomfortable, folks saying racial slurs to me, I

1 sought community with other students of color on campus, and so

2 I would -- I would -- I think it would stand to reason that

3 more students of color on campus would provide more

4 opportunities for that sort of community, yeah.

5 Q. Can you be certain of the specific benefits that you would

6 receive?

7 A. No. So I've never had a -- you know, I've never been a

8 student at UNC with more racial diversity, and so I can't be

9 certain about how that would play out, but I think that would

10 be, I think, my best kind of representation.

11 Q. And you spoke earlier about what you're professionally

12 pursuing now.

13 A. Uh-huh.

14 Q. How has UNC's racial diversity prepared you for this work?

15 A. Well, right now I work with young people all around the

16 world who are trying to solve problems in their community. I

17 support them through grants, skill training. And I think that

18 the ability to connect with anyone, to make friends with

19 anyone, to understand how different cultures and different

20 races and things like that intersect and interact with one

21 another -- you know, I think that all of the skills that I

22 gained as a result of learning and working and living with

23 people who are wildly different from me at UNC led to, I think,

24 me feeling much more comfortable and confident doing that as

25 part of my job with National Geographic. And so, you know, I'm

1 very thankful for some of those skills.

2 Q. Thank you, Mr. Brennen.

3 　　　　**MS. TORRES:** I have no further questions at this time.

4 　　　　**THE COURT:** Yes.

5 　　　　**MR. HASSAN:** I'm just going to put the podium up, Your

6 Honor.

7 　　　　**THE COURT:** All right. That's fine.

8 　　(Pause in the proceedings.)

9 　　　　　　　　　　**CROSS-EXAMINATION**

10 **BY MR. HASSAN:**

11 Q. Thank you very much for sharing your experiences with us,

12 Mr. Brennen. I know it's a hassle to travel anywhere during a

13 pandemic, but especially a courtroom full of people that you

14 don't know, so thank you for being here.

15 　　I just viewed your deposition and your declaration. I just

16 have a few questions. I want to make sure I fully understand

17 your views.

18 　　Is it fair to believe -- is it fair to say that you believe

19 that there is systemic and institutional racism in the United

20 States?

21 A. Yes.

22 Q. And would it be fair to say that you believe there's

23 systemic and institutional racism at UNC?

24 A. I have experienced racism at UNC, and I certainly think

25 that UNC could do a better job of addressing racial diversity

1   on campus. I haven't actually studied systemic racism at UNC

2   specifically, and so I wouldn't want to present myself as an

3   expert.

4   Q. Certainly. Would you say that what you've just described

5   would influence UNC's administration or members of the

6   administration at all?

7   A. Can you clarify that question?

8   Q. Certainly. Yeah. Just you mentioned that you had seen

9   some, you know, things that they could do better, and I was

10 just asking if the things that they could do better were, you

11 know, coming from the administration or elsewhere. Just

12 basically I think I would like you to elaborate on what you

13 were just telling me.

14 A. So your original question was whether or not I think there

15 is systemic or institutional racism at UNC.

16 Q. Yes, sir.

17 A. And I responded with I think there -- from my own

18 experience, I have experienced racism at UNC. I also think

19 that UNC would benefit from a more racially diverse learning

20 environment. I think the students would.

21   And you're asking me now whether or not I think the

22 administration what?

23 Q. I think that you clarified that for me. Thank you.

24   And would you think that racial discrimination, broadly

25 speaking or narrowly speaking, influences the college

1 admissions process at all?

2 A. Well, as I testified, you know, I spoke pretty extensively

3 about racial discrimination in my application to UNC. So to

4 the extent that students of color do that, I would say it does

5 have an impact. Now, as I also mentioned earlier, I have not

6 studied the particulars of UNC's -- mechanics of UNC's

7 admissions process, so I don't want to speak or present as an

8 expert on that process.

9 Q. Okay. Thank you.

10   And then just to -- you mentioned very briefly that you

11 didn't have, you know, an opinion on the admissions process, so

12 I just kind of want to touch back on that for a minute very

13 briefly.

14   So you are aware that UNC's use of race in the admissions

15 process is a central dispute of this case?

16 A. Yes.

17 Q. And when the Plaintiff filed this case to challenge UNC's

18 use of race in admissions, you moved to intervene or intervene

19 to defend UNC; is that correct?

20 A. That is correct.

21 Q. But you do not have an opinion on whether UNC should or

22 should not continue using race in the admissions process; is

23 that correct?

24 A. No, that's not correct. I -- no, I think it was important

25 for my application to UNC that I be allowed to speak to my

1 experiences as a black man, and so I would hope that other

2 students continue to have that opportunity. But, as I said, I

3 don't know the mechanics of their process or, you know, I've

4 never worked at the admissions office, for example, so I can't

5 speak to and I don't want to present as an expert on that.

6   **MR. HASSAN:** I have no further questions.

7   Thank you very much.

8   **THE COURT:** All right. Anything further?

9   **MS. TORRES:** No.

10   **THE COURT:** All right. You may step down. Thank you.

11   **THE WITNESS:** Thank you, ma'am.

12   (The witness left the stand.)

13   **MS. TORRES:** Defendant Intervenors will be calling

14 Laura Ornelas to the stand.

15   **THE COURT:** All right. Thank you.

16   **MS. TORRES:** Thank you.

17   (The witness entered the courtroom.)

18   **THE COURT:** If you would give your name for the

19 record, please, first.

20   **MS. TURNER:** Yes, Your Honor. My name is Emily

21 Turner.

22   **THE COURT:** All right. Thank you. You may proceed.

23   **LAURA ORNELAS, INTERVENORS' WITNESS, SWORN**

24   **DIRECT EXAMINATION**

25 **BY MS. TURNER:**

1 Q. Good afternoon, Ms. Ornelas. Could you please state your

2 name for the record?

3 A. My name is Laura Ornelas.

4 Q. Where are you from?

5 A. I am from Chapel Hill, North Carolina.

6 Q. Can you describe your educational background for the Court?

7 A. Yes. I completed high school in Chapel Hill,

8 North Carolina, at East Chapel Hill High School and then

9 attended UNC–Chapel Hill for my undergraduate degree.

10 Q. And when did you graduate from UNC?

11 A. From UNC, I graduated in May of 2017.

12 Q. And what did you study there?

13 A. I double majored in Hispanic linguistics and Latin American

14 studies with a minor in linguistics at UNC.

15 Q. And are you one of the Student-Intervenors in this case?

16 A. Yes, I am.

17 Q. And generally speaking, why is racial diversity on UNC's

18 campus important to you?

19 A. I believe that racial diversity expands and encourages

20 further learning in the environment, and that is important to

21 me.

22   **COURT REPORTER:** Can you speak louder, please?

23   **MS. TURNER:** Me?

24   **THE COURT:** If you need to pull that mic closer to

25 you, that might be hopeful.

1   **MS. TURNER:** I can also orient myself this way. Is

2   that better?

3   **THE COURT:** It is better, uh-huh.

4   **MS. TURNER:** Okay. I apologize.

5   Q. (By Ms. Turner) Can you describe your parents' educational

6   background?

7   A. Yes. So my mother completed her -- what would be

8   equivalent to high school degree in Mexico, and my father

9   completed what would be equivalent to a middle school education

10 in Mexico as well.

11 Q. And what do your parents do?

12 A. My father owns a restaurant in Chapel Hill, and my mother

13 is a homemaker, and the restaurant is their primary source of

14 income.

15 Q. Now, as you're aware, this case involves UNC's ability to

16 consider race and ethnicity in its admissions process.

17   Do you identify with a particular race or ethnicity?

18 A. I do. I identify as Hispanic and Latino.

19 Q. And I believe that you testified you attended East Chapel

20 Hill High School; is that correct?

21 A. Yes, that is correct.

22 Q. And were you on a particular academic track there?

23 A. Yes. I was on track to not only complete the

24 North Carolina requirements to graduate high school but also to

25 attend college.

1 Q. And what kind of courses did that mean that you took on

2 that college track?

3 A. While in high school, I was -- I had the opportunity to

4 take honors and Advanced Placement courses.

5 Q. Can you describe the racial and ethnic makeup of your high

6 school?

7 A. My high school was primarily white, with the second largest

8 population probably being Asian and Asian Americans, and

9 followed by Latino and Hispanic students and African American

10 students.

11 Q. And what was the racial and ethnic makeup of the students

12 who were in your AP and honors courses that you were taking?

13 A. My honors and AP courses primarily consisted of white

14 students and Asian American or Asian students.

15 Q. So were there many other Hispanic or Latino students in

16 your AP and honors courses?

17 A. Not many. If I was lucky, there were maybe two or three,

18 but oftentimes I found myself being the sole representative for

19 my ethnic group.

20 Q. And how did the experience of being one of a few or the

21 only Hispanic or Latino student affect your sense of identity

22 while you were in high school?

23 A. While I was in high school, I think it made me feel like I

24 needed to limit how much of my culture and identity I portrayed

25 in my -- in my classrooms, and I tried to assimilate as much to

1 the people around me.

2 Q. I'm now going to ask you some questions about your

3 experiences applying to college.

4   When did you apply to UNC-Chapel Hill?

5 A. I applied in October of 2012, which was my senior year of

6 high school.

7 Q. And when you began preparing to apply to college, did you

8 have access to the same resources that your peers at East

9 Chapel Hill did?

10 A. In theory, I had access to the same resources that were

11 available at school, but I found that a lot of the knowledge

12 that my peers were obtaining was coming from outside

13 organizations or their parents or families.

14 Q. And why was your situation different?

15 A. My situation was different because I was -- I'm a

16 first-generation college student, so not only was I trying to

17 learn about the application process and how to navigate not

18 only UNC's but other application processes as well, but so were

19 my parents. So it was a joint learning experience for all of

20 us.

21 Q. And how did your ability to participate in extracurricular

22 activities compare to that of your peers?

23 A. For the most part, I could join the clubs and organizations

24 that were available at my high school, but many of my peers did

25 not participate in work activities while in high school. So

1 for me, I was primarily helping out at the family business at

2 the family restaurant and spending a lot of time in that

3 activity.

4 Q. And how did your access to prep materials or prep courses

5 for SAT exams or AP exams compare to the access that your peers

6 had?

7 A. So I had to be very conscious of -- about the resources

8 that were available and their financial obligations or their

9 financial costs. There were a lot of resources available that

10 consisted of paying for them, and I did not always have the

11 funds to complete those, so I relied on what was accessible.

12 Q. And the resources that you did access, how did you find out

13 about them?

14 A. My greatest source of information for those were my peers

15 and my friends who, either by accident or intentionally, shared

16 that information with me.

17 Q. And you mentioned that you held a job while you were in

18 high school?

19 A. I did. So through most of high school I worked at the

20 family restaurant during the weekends and when I was not in

21 school. My father did not allow me to obtain any other job

22 until I was accepted to college because he very much thought

23 that an education was incredibly important and wanted to have

24 control over my schedule if I needed to complete other tasks to

25 obtain my goal.

1 Q. And roughly how many hours a week did you work at the

2 family restaurant?

3 A. At the family restaurant, I would say about 10 hours a

4 week.

5 Q. And I think you mentioned that your experience working a

6 job was different from your high school peers?

7 A. Yes. So my peers -- some of my peers also held part-time

8 jobs. The funds that they received -- the income they received

9 through those jobs was primarily to fund -- primarily for them

10 to fund recreational activities and spend those on whatever

11 they wanted at the time. My goal when going to work and

12 receiving an income was to save up to be able to pay for all

13 the tests and the applications that I knew were upcoming.

14 Q. You mentioned that you worked at your family restaurant in

15 part to be able to have flexibility for your application

16 obligations.

17   Once you were accepted to UNC, did you obtain an additional

18 job?

19 A. I did. Once I was accepted to UNC, my dad allowed for me

20 to obtain a different job, and I worked at a dental office in

21 their corporate offices completing various administrative

22 tasks.

23 Q. And what did you use the income from that job for?

24 A. I then used that income to complete some of those and to

25 submit my enrollment deposit and start paying off some of those

1 miscellaneous costs associated with enrolling in college.

2 Q. And how long did you hold that position?

3 A. I held that position through the end of my senior year in

4 high school and all through college.

5 Q. I'm going to ask you some questions now about your college

6 application itself.

7   When you applied to UNC, what do you remember, roughly

8 speaking, about your grades and your test scores?

9 A. I was primarily receiving As and Bs and I think a -- one or

10 two Cs, and I remember thinking that my grades and test scores

11 were primarily -- fairly average to the rest of my peers at my

12 school, although I don't know how they would compare on a state

13 or national level.

14 Q. And do you remember roughly where you were ranked in your

15 class?

16 A. I believe I was ranked 106th in my class.

17 Q. And do you think that your rank, grades, and test scores

18 alone adequately reflected what you brought to the table as an

19 applicant to UNC-Chapel Hill?

20 A. I don't think they did. I think they -- they provide a

21 part of me, but there was so many experiences and so many

22 different factors of me that I wanted to present to the

23 university and I think were important in considering who I was.

24 Q. Do you remember if you shared your ethnic identity in your

25 application to UNC?

1 A.   I do remember, and I did share that information with UNC.

2 Q.   How did you share it?

3 A.   I shared it through not only filling out the boxes in the

4 application, but also in one of my essays I spoke about my

5 identity.

6   MS. TURNER: Your Honor, I'm going to start discussing

7 an exhibit which has been designated under seal, so I would ask

8 that the audio and video be turned off for this portion.

9   THE COURT: We will do so.

10   (Audio privacy settings were turned on.)

11   (Sealed portion of trial testimony occurred next and

12 appears under separate cover filed with the court.)

13   (Audio Privacy settings were turned off.)

14 Q.   (By Ms. Turner) We've been talking about the application

15 process, but now I'm going to ask you some questions about your

16 experiences as a student at UNC.

17   While you were a student at UNC, did you have the chance to

18 take classes with students from racially diverse backgrounds?

19 A.   I did. I -- I was very happy to experience classes that

20 had a much more diverse racial makeup, especially in comparison

21 to the classrooms I had been in high school.

22 Q.   Is there any class that stands out in your memory where

23 having a diverse group of students was particularly meaningful

24 for the learning environment in that class?

25 A.   I do. I remember one class in particular my junior year of

1 college. It was a class about the Latin American city where it

2 brought together graduate students and undergraduate students,

3 as well as -- and students who came from very many different

4 cultural backgrounds.

5 Q. You just described some of the diversity that you

6 encountered, I believe, including within Hispanic and Latino

7 students at UNC.

8   Did you encounter any other types of diversity within

9 groups of Hispanic and Latino students at UNC-Chapel Hill?

10 A. I did. I -- not only did the diversity range from the

11 nationality that students associated with, I think one of the

12 more eye-opening discussions I had were from students who were

13 undocumented or had family who were undocumented. It is not an

14 experience that I can say that I've lived through. My parents

15 have always been documented during my life, so even though on

16 paper we seem like we came from very similar backgrounds or had

17 many similarities, I learned so much from their perspective and

18 now can consider things that before had never even crossed my

19 mind.

20 Q. And I'm going to ask you now about your own participation

21 in the classroom. How did the level of diversity in a

22 particular classroom affect your ability to participate in that

23 class?

24 A. I found that in classrooms where there was more diversity I

25 felt much more comfortable sharing my experiences and my

1 opinions because either there was less background information

2 that I needed to provide about my own experiences or everyone

3 was in need of providing background information to the

4 experiences that they were sharing about. So whereas prior my

5 background didn't -- and my experiences were so different from

6 my peers, it was now acceptable and encouraged to share those

7 experiences.

8 Q. And when you said "prior," just for the record, did you

9 mean in high school?

10 A. Yes, I meant in high school.

11 Q. And you testified earlier about how your high school

12 experience of being one of a few Hispanic or Latinos affected

13 your sense of identity.

14   Did your sense of ethnic identity change while you were at

15 UNC-Chapel Hill?

16 A. Yes, it changed greatly. I -- I grew to embrace it to a

17 degree that I had not been able to embrace it before. I think

18 before I was trying to limit how much about my culture and

19 background I shared with the world, whereas once I was able to

20 encounter more diverse spaces and have more experience sharing

21 my experiences and the way that I was brought up, I then also

22 felt more comfortable sharing it with people outside of those

23 diverse spaces.

24 Q. I'm going to ask you some questions now about your

25 activities outside the classroom. Were there any

1 extracurricular activities you participated in at UNC that are

2 particularly important for you?

3 A. Yes. So my main -- the activity that I dedicated the most

4 time to in undergrad was participating in what was then called

5 NC SLI, or NC Scholars' Latino Initiative, which was a

6 mentoring program for high school students in the area and in

7 surrounding areas that identified as Hispanic or Latino, and

8 then they received a mentor from UNC, and we mentored them

9 through about three years of their high school and our

10 undergraduate career.

11 Q. Did you hold any particular leadership roles in SLI?

12 A. I did. After my first year as a mentor, I was -- I signed

13 up to take on the leadership position of codirector of family

14 engagement, where I developed curriculum and taught that

15 curriculum to the families, parents and guardians of the high

16 school students who were attending the program.

17 Q. And did your identity as Hispanic and Latina inform how you

18 designed your programming as codirector of that project or

19 committee?

20 A. It did. It greatly influenced it. I saw those parents and

21 guardians as my own parents and my mom and dad, so I knew where

22 they were coming from to a degree; and my objective was to

23 teach them as much about the application process as possible so

24 that they could support their student. And many of the high

25 school students who were participating would identify as

1 first-generation college students as well, so I felt that if I

2 could prevent everyone in the family from starting from

3 scratch, it -- it was important.

4 Q. And why did you feel it was important that you facilitate

5 conversations for the entire families of these potential

6 college applicants?

7 A. I think -- at least for our culture, I think when -- and

8 especially for a student that is first generation, it's not

9 just the student going off to college. It's the whole family

10 going off to college for the first time. The system and the

11 way education is set up here in the U.S. is very different from

12 that of other countries, especially Latin American countries,

13 so I found that that program was a way to bridge some of the

14 gaps in knowledge and potentially help parents understand that

15 aspect of it and be more accepting of whatever their student

16 decided to do, because I remember there being a lot of tension

17 between my parents and I when we were trying to learn about

18 this application process.

19 Q. Shifting gears a bit, while you were at UNC Chapel Hill did

20 you feel that overall there was adequate representation of

21 students of color?

22 A. I don't think so. I think there could be more. I still

23 found myself in classrooms occasionally where I was one of very

24 few students of color or I was the sole representative of -- of

25 my ethnic group.

1 Q. And when you encountered that lack of representation, how

2 did it affect you?

3 A. I think in some of those instances I retreated to some old

4 strategies of -- of how I coped being in those spaces, found

5 myself maybe participating less and not sharing as much of my

6 opinion or experiences in those environments.

7 Q. And when you began reverting to those old strategies, were

8 there any resources or spaces that helped you counteract that

9 effect?

10 A. I think the community that I developed while working with

11 NC SLI were friendships that carried outside of those

12 organizations, really helped me analyze what those situations

13 were doing to my -- to my -- to my actions in them and allowed

14 me to move past the -- the hiding and the assimilation and

15 encouraged me to share my experiences even though it may have

16 been uncomfortable at times.

17 Q. Were there any other organizations that were helpful to you

18 in that way?

19 A. I would say not necessarily organizations, but individuals

20 on campus.

21 Q. And what was the racial or ethnic makeup of both those

22 individual groups and SLI that you just described?

23 A. The undergraduates -- the UNC undergraduate population at

24 SLI was primarily students of color or students who identified

25 as Hispanic or Latino, but we were inclusive to all

1 ethnic/racial identity groups within the organization, and most

2 of the individuals that I found -- that I would consider

3 helping through me some of those times usually identified as

4 students of color, people of color.

5 Q. Thank you. And I'm going to shift gears again and ask you

6 some questions about your socioeconomic status. Can you

7 describe your family's socioeconomic status while you were

8 growing up?

9 A. Yes. While I was growing up, I would say my family

10 consisted of lower to low-middle class. All through high

11 school I received free or reduced lunch.

12 Q. And did you receive need-based financial aid at UNC when

13 you attended?

14 A. I did. I did receive need-based financial aid. I was part

15 of the Covenant scholarship program.

16 Q. And you've already testified that you're a first-generation

17 college student?

18 A. Yes, that is correct.

19 Q. Are your socioeconomic status and first-generation college

20 status important to you?

21 A. Yes, they are. Just like my racial and ethnic identity, I

22 believe they are important parts to getting a full picture of

23 who I am.

24 Q. And do they inform your perspective?

25 A. Yes, they greatly inform my perspective. I think having

1 all those identity groups and the way they uniquely intersect

2 in my life is important to how I view the world.

3 Q. And do you think that your perspective is the same as the

4 perspectives of your peers who may have also been lower-income

5 or first-generation college students but were not Hispanic or

6 Latino?

7 A. I believe there can be overlap, but I don't think that it

8 would be the same.

9 Q. Why not?

10 A. All my identities uniquely intersect in the way that I've

11 grown up and the way that I've experienced the world, and

12 someone who comes from a low socioeconomic status may be able

13 to -- to identify with a lot of my experiences but won't

14 identify with all of them. They -- we won't -- the world will

15 see us differently, and we will see the world differently as

16 well.

17 Q. Could you meaningfully separate your socioeconomic and

18 first-generation college student status from your ethnic

19 identity?

20 A. I could talk about them individually if needed, but I don't

21 believe if I -- if the goal is to present a full picture of

22 myself, I don't think they could be separated.

23 Q. I'm going to finish by asking you a few questions about the

24 future.

25   Where are you currently employed?

1 A.   I am currently employed at UNC at the Adams School of

2 Dentistry within the dental hygiene program as their admissions

3 counselor and student services manager.

4 Q.   And did you hold any other jobs prior to that after

5 graduating?

6 A.   I did.   Prior to my current position and after graduation,

7 I completed two years with the Carolina College Advising Corps,

8 which is a subgroup of the national College Advising Corps, and

9 I worked in a high school in Charlotte, North Carolina.

10 Q.   And can you tell us just a little bit about what the

11 Carolina College Advising Corps does?

12 A.   So the Carolina College Advising Corps places recent UNC

13 grads in high schools with majority populations that are

14 minority, low-income or underrepresented students in higher

15 education; and their goal as college advisors in these high

16 schools is to aid and advise the entire student population

17 about the college application process, regardless of what

18 school they wish to attend.

19 Q.   Do you have any plans regarding your own education?

20 A.   I do.   I believe my time at the -- in the high school with

21 the Carolina College Advising Corps greatly influenced it, and

22 I'm hoping to obtain a master's in higher education

23 administration, and I am currently completing those graduate

24 applications.

25 Q.   And long term, what are your goals for the future?

1 A. I am not exactly sure what position I'll be holding or

2 where I will be holding a position, but my goal I think is

3 still to help families navigate the college application process

4 and gain more students that are minority, low income, and

5 underrepresented an entire education. I know how much I

6 struggled -- and that was having such a supportive family with

7 it -- that if I can help even just one more student, you know,

8 navigate that process, I think it's important and it's where my

9 passion lies.

10 Q. Thank you.

11   And do you think that the racial and ethnic diversity that

12 you experienced while at UNC-Chapel Hill has helped prepare you

13 to achieve that goal?

14 A. I -- I think it has. I think in comparison to the high

15 school that I went, there was more racial diversity at UNC, and

16 I think that increase in racial diversity increased the

17 perspectives that I have on the world and how I think about

18 different tasks and different -- different problems. And I can

19 only imagine how much more I would have learned, how many more

20 perspectives I would have gained had there been even more

21 racial diversity.

22 Q. Thank you, Ms. Ornelas.

23   **MS. TURNER:** I have no further questions for this

24 witness, Your Honor.

25   **THE COURT:** Yes, sir.

1   **MR. HASSAN:** None. I have no further questions.

2   **THE COURT:** All right. Thank you. You may step down.

3   (The witness left the stand.)

4   **MS. TORRES:** Defendant Intervenors will be calling a

5   final witness, Star Wingate-Bey.

6   **THE COURT:** Thank you.

7   (The witness entered the courtroom.)

8

9   **THE COURT:** Yes, sir. Would you state your name for

10   the record, please?

11   **MR. HOLTZMAN:** Yes, ma'am. Jack Holtzman, an attorney

12   with the North Carolina Justice Center for Student-Intervenors.

13   **THE COURT:** All right. Thank you.

14   **STAR WINGATE-BEY, INTERVENORS' WITNESS, SWORN**

15   **DIRECT EXAMINATION**

16   **BY MR. HOLTZMAN:**

17   Q. Good afternoon. Ms. Wingate-Bey, how are you?

18   A. Hi. I'm well. Thank you.

19   Q. So can you state your full name, please, for the record?

20   A. Star Zakia Wingate-Bey.

21   Q. Thank you. And can you describe --

22   **THE COURT:** I'm going to ask you to speak up a little

23   bit.

24   **THE WITNESS:** Okay. A little bit more?

25   **THE COURT:** A little bit. That would help.

1   **THE WITNESS:** Yes, Your Honor.

2   **THE COURT:** Yes, sir.

3 Q. (By Mr. Holtzman) And can you describe your educational

4 background for the Court?

5 A. Yes. I graduated from Charles Jordan High School in

6 Durham, North Carolina, and then I went on to graduate from

7 UNC-Chapel Hill with a degree in communications with a focus in

8 media production and a minor in history.

9 Q. And do you remember what your graduating GPA was at that

10 time?

11 A. Yes. I believe it was around 3.5 or 3.6.

12 Q. And this case involves -- you understand this case involves

13 UNC's ability to consider race in admissions.

14   Do you identify with a particular race or ethnicity?

15 A. Yes, I identify as black or African American.

16 Q. Can you tell us a little bit about family experiences that

17 you've had when growing up that affected your self-identity as

18 being African American?

19 A. Yes. I grew up in a culturally black household, I'd say,

20 from, you know, what we ate, how we celebrated, what we

21 celebrated. We celebrated Kwanzaa. My dad, he was an

22 inner-city DC kid. He was a Black Panther in his day. He was

23 drafted into Vietnam as an 18-year-old. My mom is from rural

24 North Carolina, and I remember her telling me about her small

25 town that struggled with integration, specifically a story

1 about, you know, when they were trying to integrate, the white

2 people in town filled the pool with concrete so that the black

3 residents couldn't use it.

4 Q. And how did your experiences, family discussions,

5 experiences you had while growing up, those that are connected

6 to your racial identity -- how did they affect your perspective

7 prior to going to college?

8 A. Yeah, definitely informed the way that I thought about

9 things, the way that I was raised, especially with school with

10 that framing, you know, on my life. My parents always imposed

11 upon me, you know, you have to be twice as good to get as far

12 as my white counterparts or peers; and especially, you know,

13 with my parents, it kind of turned into, you know, just to be

14 the best and to work as hard as possible. That's how I was

15 raised.

16 Q. Let's talk about high school a little bit.

17   Were you involved in extracurricular activities?

18 A. Yes, I was -- I danced primarily. That was my main

19 extracurricular activity. I did that my whole life. And then

20 I was also in a few clubs, Key Club. I was in Spanish Honor

21 Society, National Honor Society. Pretty involved, yeah.

22 Q. What sort of leadership roles did you play in those

23 extracurriculars?

24 A. In -- I was dance team captain probably all of high school.

25 And then for National Honor Society, I was vice president of

1 that group, you know; generally on exec boards of different

2 kinds -- you know, the different groups I was a part of it.

3 Q. And can you tell us about your high school grades, your

4 class rank?

5 A. Yes. I was ranked in the top 10 percent. I graduated

6 probably around 30 of a class of 400, 30-something. Class rank

7 I think weighted was about 4.4, 4.5. I took about five APs,

8 got 4s and 5s on those, 5 on my AP U.S. History exam. I

9 definitely had rigorous coursework at Jordan and did well.

10 Q. That is Jordan High School?

11 A. Jordan High School, yes.

12 Q. And did you put all of that academic information in your

13 Common Application to UNC?

14 A. Yes.

15 Q. So how did the rigor of -- the academic rigor at Jordan,

16 how did that prepare you for being a student at UNC?

17 A. I was very prepared to go to UNC. Like I said, I took

18 quite a few AP-level classes and definitely worked hard and had

19 to study, and I remember being a first-year on campus and

20 feeling like I was ready for the amount of coursework and the

21 level of coursework that I was doing at UNC.

22 Q. Do you remember what your grades were as a freshman?

23 A. As a freshman? Yeah, I definitely -- freshman year I

24 definitely had all As. I think I started with a 3.7 or

25 something like that.

1 Q. So did you fill out a Common Application when you applied

2 to UNC?

3 A. Yes.

4 Q. And was there an application question asking you to

5 identify your race?

6 A. Yes.

7 Q. How did you answer that question?

8 A. I checked the box for black or African American.

9 Q. And was it important -- well, how important was it for UNC

10 to know your racial identity?

11 A. I think it's important for -- for UNC to know -- for me, it

12 was important for UNC to know I was black. I think it colors

13 all of my experiences and can put some insight on my whole

14 college -- I mean, my whole high school experience.

15 Q. And do you believe it was helpful for admissions reviewers

16 to know the life experiences and racial backgrounds of other

17 applicants as well?

18 A. Yes, I think it would be equally important to know the race

19 of all -- all who are applying to UNC.

20 Q. I'd like to ask you about racial diversity at UNC itself.

21   What sort of interactions did you have with other students

22 at UNC from other races, classes, other types of diverse

23 backgrounds?

24 A. I was able to have a lot of experiences with different --

25 with multicultural students at UNC. I sought those out on

1 purpose. I was a part of a dance team called Misconception.

2 We were a hip-hop team, and we were predominantly black and

3 other people of color on our team. And, you know, also at UNC

4 I was able to meet and interact with those from Asian heritage

5 that I had never really experienced in high school and growing

6 up, specifically south Asian. I was able to meet Indian people

7 and go into their homes and eat their family -- not eat their

8 family -- eat their foods, meet their family, and learn about

9 their culture. I just had a lot of invaluable experiences like

10 that with other people of color on UNC's campus.

11 Q. Any other examples of interactions that you had with

12 students of other backgrounds?

13 A. Yes. There's also this program called Carolina United,

14 which is a weeklong leadership camp where you have to apply.

15 You go, and you talk about issues regarding race, sexuality,

16 gender, religion. And you kind of discuss these, you know, big

17 social kind of implications around these things, and you have

18 these conversations, and you open up. It's one of the best

19 things I did at UNC. Many people would say that. And it just

20 makes you a more empathetic person, a more accepting person,

21 and you can bring that back to the campus community with you

22 and you just become a better member of the community, as well,

23 I think, a better student.

24 Q. Can you describe any of the conversations that you had with

25 other UNC students while you were there at the Carolina United

1 event?

2 A. Yeah, we opened up a lot about kind of our experiences

3 growing up in whatever intersection we grew up with, and I

4 learned a lot about, you know, some of my Latina classmates and

5 kind of their experiences, you know, maybe with immigration or

6 with their parents who may not have been documented and how

7 that shapes who they are and how they, you know, present

8 themselves and how they come onto UNC's campus to be a part of

9 that community.

10 Q. And how did -- those conversations while attending Carolina

11 United, did they change any of your world views?

12 A. Yes. Getting to learn one-on-one from other people and

13 your peers I feel like, for me, opened up my mind and made me

14 able to think, you know, more critically about things and able

15 to -- and made me a little bit more empathetic or even just

16 more knowledgeable about some of the things other people are

17 going through and what they come to the table with.

18 Q. So how did the racial and ethnic diversity that you

19 experienced at Carolina -- how did that impact your education?

20 A. Yeah, you know, I think it made my education a lot richer.

21 I -- the times that I was in classes that were racially

22 diverse -- I had one class with a black professor -- black

23 female professor and mostly black students. It was an African

24 Americans before 1865 class, and the conversations that we were

25 able to have, all being of a diverse background, were much

1 richer, more constructive. Even the feedback from the teacher

2 I think resonated more because, you know, I think we felt like

3 we were in a safer space to kind of talk and really discuss and

4 dive deep into, you know, the text we were reading, to relate

5 back to our experiences: Our shared experiences, our different

6 experiences. You know, having that diversity in a classroom

7 made for a really, really rich learning experience.

8 Q. And to what degree did you encounter diversity within any

9 racial group?

10 A. Yeah, that's -- you know, one thing that I really benefited

11 from by going to UNC was getting to meet all of these different

12 black people who were from different parts of the country or

13 the state, and it really kind of helps -- I really learned

14 that, you know, we aren't a monolith and that we all have very

15 different experiences, but it also -- I also learned that, you

16 know, the black experience runs through it. We just kind of

17 built this, you know, community of -- of black people on

18 campus, that we all were able to learn from each other and also

19 share experiences with each other.

20 Q. Did -- did that diversity within the African American

21 community -- are you aware of white students being aware of

22 that?

23 A. You know, I -- I'm not sure, you know, how much they're

24 aware of it, but I definitely think that they benefit from

25 having different kinds of black people around them and in their

1 classes to hear different kinds of -- you know, the experiences

2 that we have that can be different or the same.

3 Q. So while you were attending UNC, what was your view

4 regarding whether there was adequate representation of students

5 of color at UNC?

6 A. I did not feel like there was enough diversity at UNC.

7 Q. Why? Why is that?

8 A. I would -- you know, while I said that I was a part of

9 these groups and, you know, getting to meet, you know

10 multicultural people, that was because I sought it out. I had

11 to look for it, and I don't think you would find that if you

12 weren't looking for it. Specifically, I was often in

13 classes -- like, you know, in the classroom as the only person

14 of color, only black person in the room. So my social

15 extracurricular time would be one way, but in the classroom

16 where we're doing most of our learning, I would honestly

17 sometimes be the sole person of color.

18 Q. And so let's talk a little bit about how that was reflected

19 in the classes that you attended. Other than the one class

20 where you said that you attended that had a large number of

21 African American students, were most of your classes, some of

22 your classes -- how many classes did you attend where the

23 majority of the students were white?

24 A. Were white? Most of my classes. In most of my classes,

25 most of the students were white.

1 Q. And -- and in most of your classes, about how many African

2 American students were there? Were you the only one or was --

3 A. At times I was the only -- if my memory serves me, at times

4 I was the only one or felt like I was the only one, and

5 sometimes it -- maybe there were, like, 5 to 10 in a class of,

6 like, 30. In larger lectures there would be more, but, you

7 know, in the smaller classes, especially the further you get

8 into your major, it kind of dwindles down.

9 Q. So in those classes where there were few -- where either

10 you were the only African American or there were very few

11 African Americans or students of color, how did that make you

12 feel while you were in class?

13 A. Right. When you're the only person of color in a

14 classroom, it can feel isolating, especially as the only black

15 person it can feel isolating. You can also -- I also often

16 felt like I was, you know, the token or the sole representative

17 for my race or the fact checker for my race, which can be a bit

18 of a burden, in class.

19 Q. And -- and did that -- how did that play out? Were there

20 any specific classes where having to be the fact checker played

21 out on any specific topics?

22 A. Yeah. Yes. I remember specifically in a polysci class I

23 had where I was one of the only -- maybe the only black person

24 in the room. Specifically, we were talking about the voter ID

25 laws. They were kind of hot back in the -- when I was there.

1   And I -- I was -- I felt like I had to be the person to speak

2   up and say how a law -- racist law like that can inflict harm

3   on people of color, black people specifically.

4   And those kinds of topics and having to be the one to be,

5   like, "Wait a minute," or to kind of intervene, you know, in

6   the discussion, they all kind of add up to being that one

7   person in the classroom who's always having to be maybe --

8   maybe not the contrarian, but the interrupter, you know, to

9   bring my perspective to the classroom; and it at times can

10 be -- I already said this -- like a burden or a job you have to

11 do. Also, you know, sometimes, depending on the topic in the

12 class, you have to come in with your guard up already, and

13 that's just not conducive to learning, you know.

14 Q. How did that feeling of having to be a spokesperson affect

15 your participation in the class?

16 A. It doesn't really affect my participation. It's not

17 something I'm unused to with the schooling that I had, high

18 school to Carolina, but, you know, it's draining to have to

19 come into class knowing that you're going to have to, you know,

20 chime in to be the sole representative for your race to make a

21 point, you know.

22 Q. Were there situations that helped ease your sense of

23 isolation while you were at UNC?

24 A. Yeah, definitely my found community, like the dance team I

25 was talking about and some other, you know, multicultural --

1 basically, you know, finding other black people on campus

2 really helps feel like you're not the only one kind of going

3 through, like, being the only person of color in the room.

4 Q. Any other -- any specific examples of -- of safe places

5 where -- where you would go?

6 A. So could you --

7 Q. Let me rephrase that. Are there situations at UNC --

8 specific events or groups or places where you would go to kind

9 of break out of that isolation, to reenergize?

10 A. Yeah. Definitely my -- my dance group, which was primarily

11 black and people of color, and even my -- my found friends that

12 included white people and, like I said, you know, my -- the

13 Indian friends that I found kind of created this safe space for

14 me to -- to kind of be away from being that spokesperson, that

15 fact checker, where I can be amongst, you know, people who care

16 about me. But those found families on campus to create that

17 safe space.

18 Q. And were you on campus back when the Trayvon Martin

19 decision came out?

20 A. Yes, I was.

21 Q. How did that affect you?

22 A. Yeah, that was a good example of looking to find those

23 people that looked like me so that I could have a reprieve from

24 the bad news. Yeah, I was on campus when that decision came

25 out, and we immediately were just texting each other, like,

1 "Where are you?" trying to find that comfort, you know, not

2 where -- you know, other black people. We were all just trying

3 to find each other so we could be away from whiteness for a

4 second and just feel safe and to fellowship and just come

5 together.

6   So, yeah, those kinds of spaces are really, really

7 important when you're in a predominantly white space, to be

8 able to find other people who look like you so that you can,

9 I'll say it again, feel safe.

10 Q. So based upon your personal experience, do you think that a

11 reduction in the number of black and Latino students on campus

12 would affect the racial climate?

13 A. Yes, I think it would be harmful to students of color if

14 there was less diversity on UNC's campus.

15 Q. Can you give an example of why you think that?

16 A. Yeah. Yes. I think if there -- if the -- if there was any

17 less diversity, I think it would affect, you know -- for black

18 people, I think that feeling of safety that you have on campus.

19 I think retention rates would be affected that are already low.

20 Retention rates for black students would be affected if there

21 was less diversity. I think that your Carolina experience of

22 feeling welcomed or feeling like you belong on campus would

23 be -- would significantly decrease the less black people you

24 see on campus. You know, you need to see people that look like

25 you to feel like you can belong somewhere, so if there was less

1 diversity on campus, I just think it would be harmful from the

2 social to the educational to the learning, all of those

3 aspects.

4 Q. What sort of message to students of color might it send if

5 UNC ended its consideration of race in its admissions process?

6 A. I just think it would -- it would just say that we aren't

7 valued for the specific cultural experiences that we could

8 bring to UNC as black people or any person of color. I think

9 your race really colors your experience and what you can bring

10 to the table or to a community and how you arrive to the

11 community. I think it would just show that our contributions

12 and what we -- yeah, what we bring would just -- aren't as

13 valued if they stopped considering race.

14 Q. Are you aware of UNC's history of racism and exclusion?

15 A. Yes, very much.

16 Q. While at UNC, did you come into contact with any monuments

17 or symbols of that racist legacy?

18 A. Yes. I was -- I was there when -- yes. I was there when

19 the kind of momentum was building to bring down Silent Sam,

20 which is a Confederate memorial. It was a statue -- like, a

21 huge statue on campus.

22   You know, I was also there when we were kind of -- the

23 momentum was building to change the name of Saunders Hall,

24 which is now Carolina Hall. But Saunders, he was a UNC

25 alumnus, but was a member of the KKK. And I remember

1 feeling -- you know, when we were calling for those things to

2 be taken down or renamed, I just remember feeling ignored by

3 UNC leadership. Even one of the Board of Trustees I think said

4 to focus on something more important. And so to kind of have

5 to walk past all of the racist wallpaper that is all over UNC

6 every day adds to that feeling of not being valued on campus,

7 especially for the contributions that I think black people have

8 made to UNC's campus for so long and -- I'm sorry.

9 Q. Now, you -- you graduated in 2016?

10 A. Yes.

11 Q. Okay. What professional work have you pursued since UNC?

12 A. I -- I work in an advertising agency in New York called BBO

13 New York, and I'm a producer there.

14 Q. And how did your exposure to racial diversity at UNC help

15 prepare you for your work?

16 A. Yeah, I think a lot of what I learned at UNC about how

17 to -- from people of other cultures, like, you know, how to --

18 not how, but, you know, to be more empathetic and more

19 open-minded and more accepting I take with me to my job,

20 especially since we -- you know, we're an advertising agency.

21 We make commercials that are seen nationally, so I think it's

22 important for someone like me to be able to step into a room

23 and -- and bring a perspective of diversity into my job so

24 that -- that is much needed in the advertising world, which is

25 pretty white and male.

1 Q. Why did you choose to participate in this case?

2 A. I feel strongly about diversity and inclusion in all spaces

3 that I'm in, and I wanted to participate in this in the hopes

4 that it would help create the UNC that I wish that I had had

5 while I was there.

6   **MR. HOLTZMAN:** No further questions, Your Honor.

7   **THE COURT:** All right. Yes, sir.

8   **MR. HASSAN:** No questions, Your Honor.

9   **THE COURT:** All right. Thank you. You may step down.

10 Thank you very much.

11   **THE WITNESS:** Thank you.

12   Thanks everyone.

13   (The witness left the stand.)

14   **MS. TORRES:** And we don't have any other witnesses for

15 today.

16   **THE COURT:** All right. Can you help me with who we

17 have for tomorrow? How many student witnesses do we have?

18   **MS. TORRES:** We have three: Hanna Watson, Luis

19 Acosta, and then Rimel Mwamba; and each of these would be

20 limited to 45 minutes.

21   **THE COURT:** All right. All right. That's helpful.

22   All right. Before we leave today, is there anything else

23 that we need to discuss?

24   **MS. TORRES:** No.

25   **THE COURT:** Court is adjourned until 9:30 a.m. in the

1 morning.

2   (Proceedings recessed at 4:50 p.m.)

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4

5   **C E R T I F I C A T E**

6   I, LORI RUSSELL, RMR, CRR, United States District Court
   Reporter for the Middle District of North Carolina, DO HEREBY
7 CERTIFY:

8   That the foregoing is a true and correct transcript of the
   proceedings had in the within-entitled action; that I reported
9 the same in stenotype to the best of my ability and thereafter
   reduced same to typewriting through the use of Computer-Aided
10 Transcription.

11

12 *Lori Russell*

13 Lori Russell, RMR, CRR   Date: 12/15/2020
   Official Court Reporter

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